JVC

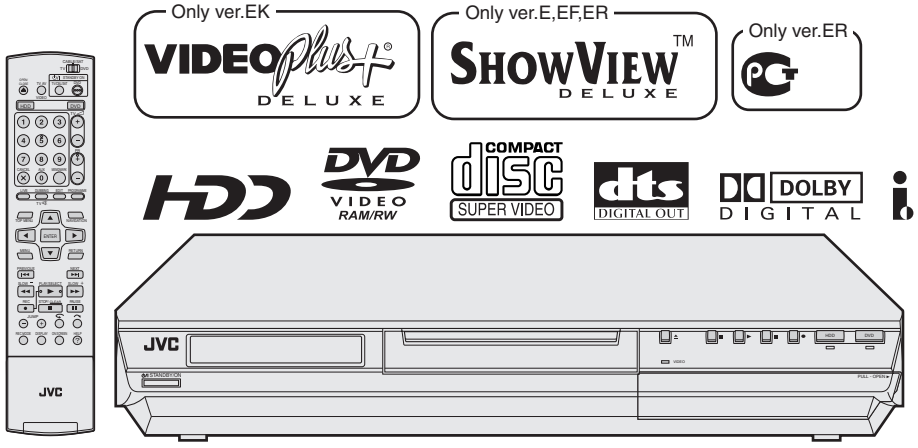
SERVICE MANUAL

DVD&HDD VIDEO RECORDER

DR-MH20SE, DR-MH20SEK, DR-MH20SEF
DR-MH30SE, DR-MH30SEK
DR-MH30SEF, DR-MH30SER

Area Suffix

EK ---------- U.K.
EF ---------- France
ER ---- Russian Federation
E ------- Continental Europe
Northern Europe



DR-MH20SE, DR-MH20SEK, DR-MH20SEF [D4HR20]
DR-MH30SE, DR-MH30SEK, DR-MH30SEF, DR-MH30SER [D4HR25]

Since the whole mechanism assembly unit is replaced, the DVD recorder mechanism of this unit need not be adjusted.

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No.YD027
2004/9

SPECIFICATION

	DR-MH20SE,DR-MH30SE,DR-MH30SER	DR-MH20SEK,DR-MH30SEK	DR-MH20SEF,DR-MH30SEF
GENERAL			
Power requirement	AC 220 V - 240 V~, 50 Hz/60 Hz		
Power consumption	Power on : 37 W Power off : 19.3 W		
Temperature	Operating : 5°C to 40°C Storage : -20°C to 60°C		
Operating position	Horizontal only		
Dimensions (W × H × D)	435 mm × 70 mm × 345.5 mm		
Weight	6.1 kg		
Input/Output			
S-video input	Y:0.8-1.2 Vp-p, 75 ohms C : 0.2 -0.4 Vp-p, 75 ohms		
S-video output	Y : 1.0 Vp-p, 75 ohms C : 0.3 Vp-p, 75 ohms		
Video input	0.5- 2.0 Vp-p, 75 ohms (pin jack)		
Audio input	-8 dB, 50 kilohms (pin jack) Corresponding to mono (left)		
Audio output	-8 dB, 1 kilohms (pin jack)		
i.Link	4-pin for DV input		
Component video output	Y : 1.0 Vp-p, 75 ohms CB/CR, PB/PR: 0.7 Vp-p, 75 ohms Corresponding to copy protection		
Digital audio output	Optical: -18 dBm, 660 nm Coaxial: 0.7 Vp-p, 75 ohms Corresponding to Dolby Digital and DTS Digital Surround Bit stream Selectable in digital audio output setting menu		
RCA connectors	IN x 1, OUT x 1		
VIDEO/AUDIO (DVD Deck)			
Recording time	Maximum 8 hours (with 4.7 GB disc) (XP) : Approx. 1 hour, (SP) : Approx. 2 hours, (LP) : Approx. 4 hours, (EP) : Approx. 6 hours, (FR) : Approx. 1 hour - 8 hours		
Audio recording system	Dolby Digital (2 ch) Linear PCM (XP mode only)		
Video recording compression system	MPEG2 (CBR/VBR)		
VIDEO/AUDIO (HDD Deck)			
Video recording compression system	MPEG2 (VBR)		
Audio recording system	Dolby Digital (2 ch) Linear PCM (XP mode only)		
Recording time	Maximum 204 hours (XP): Approx. 34 hours,(SP): Approx. 68 hours,(LP): Approx. 136 hours,(EP): Approx. 204 hours,(FR480): Approx. 272 hours		
TUNER/TIMER			
Signal system	PAL-type colour signal and CCIR monochrome signal, 625 lines 50 fields		-
TV channel storage capacity	99 positions (+AUX position)		
Tuning system	Frequency synthesized tuner		
Channel coverage (SECAM-L)	-		VHF(LOW):49 MHz-65 MHz(2-4) VHF(HIGH):104 MHz-300 MHz(5-10CATV) Hyper:300 MHz-470 MHz(CATV) UHF:470 MHz-862 MHz(21-69)
Channel coverage(PAL)	VHF(LOW): 47 MHz-89 MHz VHF(HIGH):104 MHz -300 MHz Hyper:302 MHz-470 MHz UHF 470 MHz-862 MHz	VHF(LOW):44.5 MHz-143 MHz VHF(HIGH):143 MHz-470 MHz UHF: 470 MHz-862 MHz	VHF(LOW):47 MHz-89 MHz (E2-E4,X,Y,Z) VHF(HIGH):104 MHz-300 MHz (E5-E12,S1-S20,M1-M10,U1-U10) Hyper:302 MHz-470 MHz(S21-S41) UHF:470 MHz-862 MHz(E21-E69)
Memory backup time	Approx. 60 seconds		
ACCESSORIES			
Provided accessories	RF cable,21-pin SCART cable,Satellite Controller,Infrared remote control unit,"R6" battery x 2	RF cable,21-pin SCART cable,Satellite Controller,Infrared remote control unit,"AA" battery x 2	RF cable,21-pin SCART cable,Satellite Controller,Infrared remote control unit,"R6" battery x 2

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SECTION 1
PRECAUTION

1.1 Safety Precautions

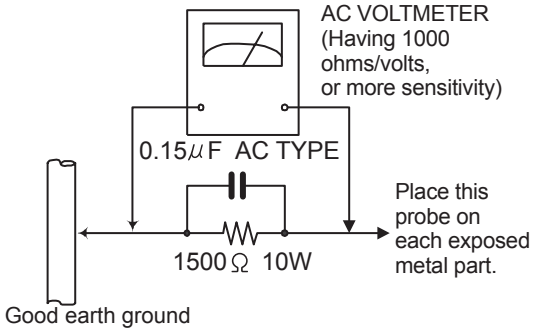
(1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.

(2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.

(4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.

(5) Leakage shock hazard testing
After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.Do not use a line isolation transformer during this check.
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000Ω per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
Measure the AC voltage across the resistor with the AC voltmeter.
Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



1.2 Warning

(1) This equipment has been designed and manufactured to meet international safety standards.
(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
(3) Repairs must be made in accordance with the relevant safety standards.
(4) It is essential that safety critical components are replaced by approved parts.
(5) If mains voltage selector is provided, check setting for local voltage.

1.3 Caution

Burrs formed during molding may be left over on some parts of the chassis.
Therefore, pay attention to such burrs in the case of preforming repair of this system.

1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the " ⚠ " mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer.
(This regulation dose not Except the J and C version)

1.5 Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The CD,MD and DVD player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.

⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

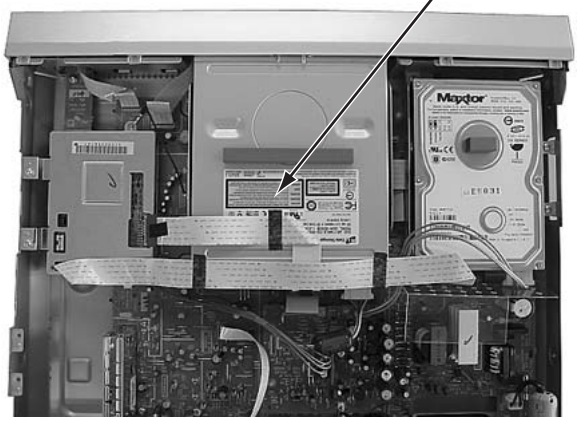
CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSUREBTO BEAM.	**VARNING :** Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen.
ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.	**VARO :** Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymätttömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi.

REPRODUCTION AND POSITION OF LABEL and PRINT

WARNING LABEL and PRINT

CAUTION	VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
ADVARSEL	SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSAETTELSE FOR STRÅLING SE IKKE IND I STRÅLEN - HELLER IKKE MED OPTISKE INSTRUMENTER.
ADVARSEL	SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNDGÅ EKSPONERING FOR STRÅLEN STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.
VARO!	AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.
VARNING	SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STRÅLEN ÄR FARLIG STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

On mechaism assembly



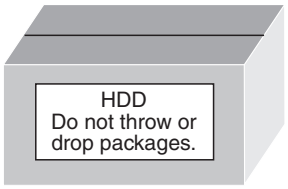
1.6 Hard Disk Drive (HDD) Handling Precautions

The HDD is a precision device for use in reading and writing a large amount of data on or from a disk rotating at a high speed. If it is not handled carefully, either abnormal operation may result or it may not be possible to read data. The HDD is sensitive to the following items and special care is required in safeguarding against them when handling an HDD. Also take care in handling a set incorporating an HDD.

(1) Vibrations and impacts
(2) Static electricity
(3) Rough handling

1.6.1 Handling in transport, etc.

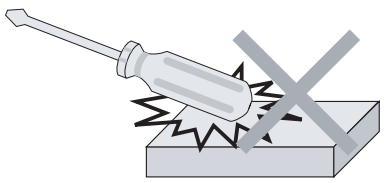
- Be sure to place the HDD in the manufacturer's specified package carton before transport.
- When receiving a package containing an HDD, check that the package carton is not damaged (such as having holes in the carton, crushed corners, etc.).
- Do not impact the packaging carton when loading or unloading it.
- It is not permitted to use the inner package carton only for transporting an HDD.
- Do not stack package cartons one upon another.



Be sure to package and transport the HDDs correctly.

1.6.2 Handling an HDD in the stand-alone status

- When handling an HDD on a hard workbench, place an antistatic mat (rubber sheet) or similar object on the hard surface (to prevent any impacts occurring between the HDD and bench).
- Do not stack the HDDs one upon another.
- Do not knock an HDD with a hard object (such as a screwdriver).
- Do not place an HDD on its side panel without using a support (do not place an HDD in an unstable position).



1.6.3 Handling the installation of an HDD

- Place antistatic mats or similar sheets on all of the surfaces on which work is conducted or when the HDD is transported.
- Do not permit the HDD to knock against the set's brackets.
- When screwing the brackets, be careful not to knock the HDD. When using a power screwdriver, use a low-shock model and arrange the tightening torque properly.
- When mounting an HDD in a main body, take care not to apply excessive force to the brackets.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

SECTION 3
DISASSEMBLY

3.1 Main body section

3.1.1 Remove the top cover (See figure 1)

(1) Remove the four screws **A** attaching the top cover on both sides of the main body.
(2) Remove the five screws **B** attaching the top cover on the back of the main body.
(3) Raise the both sides and lower part of the rear of the top cover, with opening them slightly in an outward direction. And the top cover will be removed.

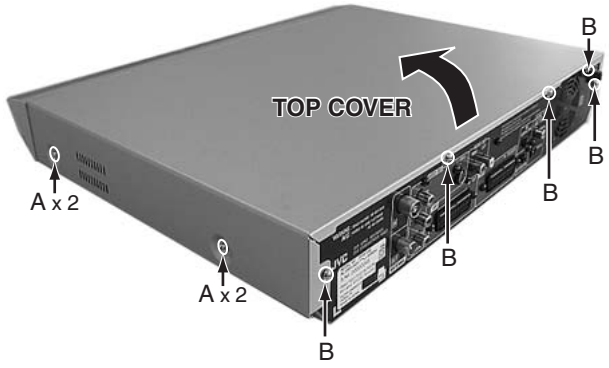


Fig.1

3.1.2 Remove the front panel assembly and HDD (See figure 2, figure 3, figure 4, and figure 5)

- Prior to performing the following procedure, remove the top cover.
- There is no need to remove the drive unit.

(1) Remove the four screws **C** attaching the HDD.
(2) Disconnect the socket wire from connector CN5307 on the switching regulator board.
(3) Disconnect the card wire from connector on the HDD.
(4) Disconnect the card wires from connector CN3001, CN3002, CN4001 on the main board.
(5) Hooks **a** and **b** are removed respectively, and the front panel assembly is removed.

NOTE:

In case of attach a front panel assembly, please let a card wire pass in the hole in the front part of a chassis, respectively, and connect.

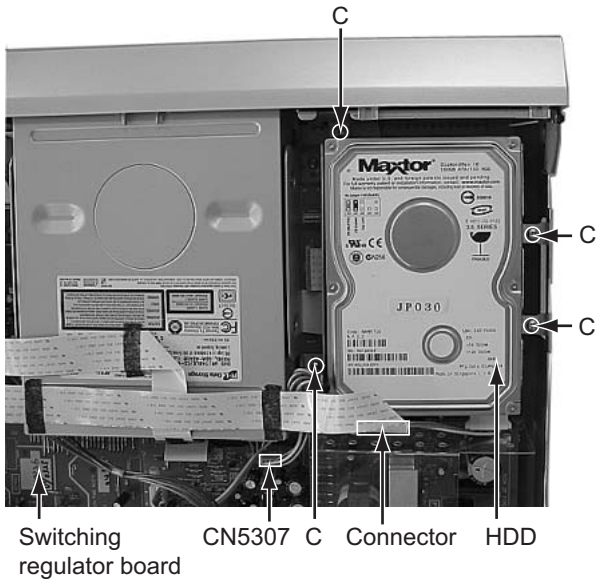


Fig.2

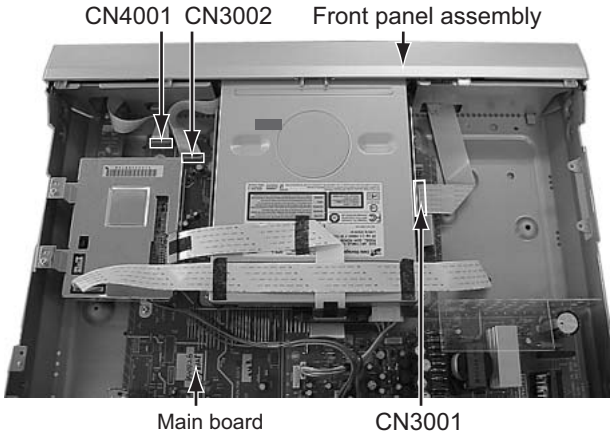


Fig.3

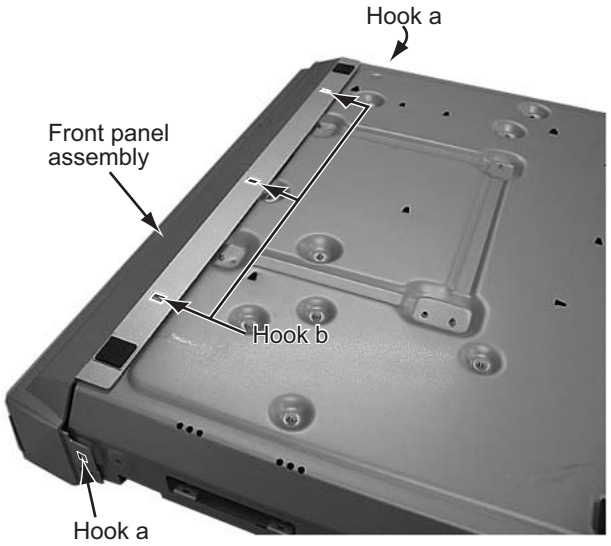


Fig.4

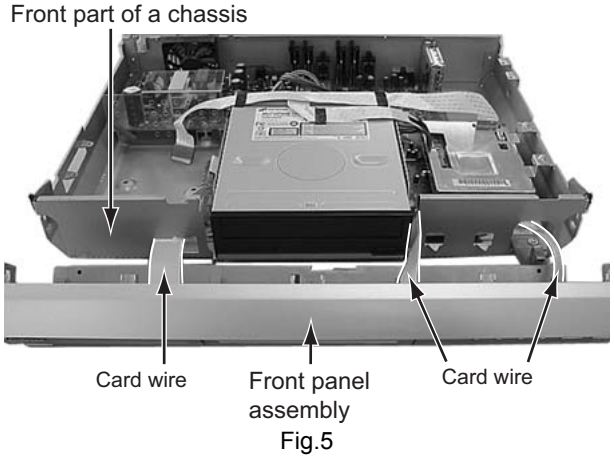


Fig.5

3.1.3 Remove the drive unit (See figure 6)

- Prior to performing the following procedure, remove the top cover.
- There is no need to remove the front panel assembly.
  (1) Disconnect the socket wire from connector CN5303 on the switching regulator board.
  (2) Disconnect the card wire from connector CN2201 on the digital board.
  (3) The tape which is fixing the card wire is removed two places.
  (4) Remove the four screws **D** attaching the drive unit.
  (5) Remove the one screw **E** attaching the lug wire.

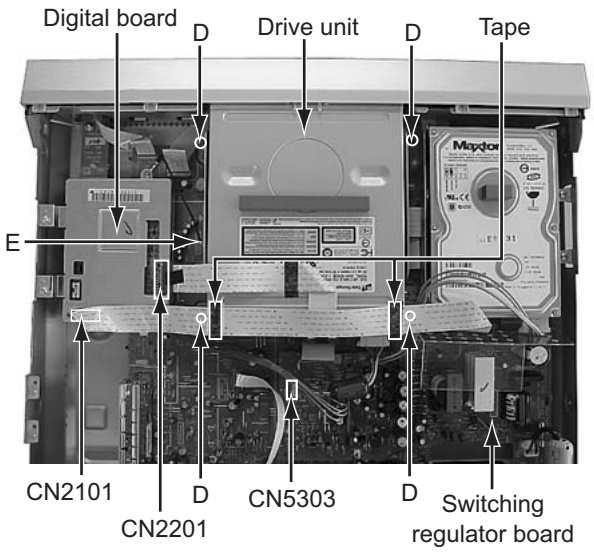


Fig.6

3.1.4 Remove the digital board (See figure 7, figure 8)

- Prior to performing the following procedure, remove the top cover.
  (1) Disconnect the card wire from connector CN2201, CN2101 on the digital board.
  (2) Disconnect the socket wire from connector CN1003 on the digital board.
  (3) Remove the four screws **F** attaching the digital board.
  (4) Lift the digital board up, and remove it. Then, the digital board is removed from the connectors CN4101, CN4102 on the main board and CN4104 on the jack board. In attaching the digital board, insert the connector on the digital board in these connectors securely.

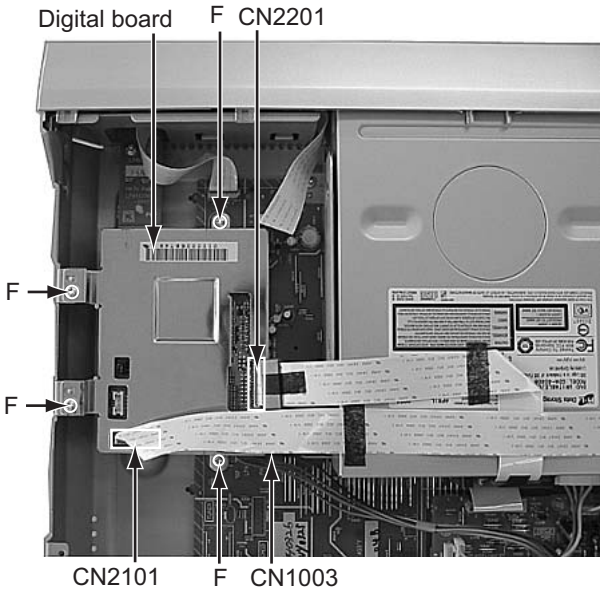


Fig.7

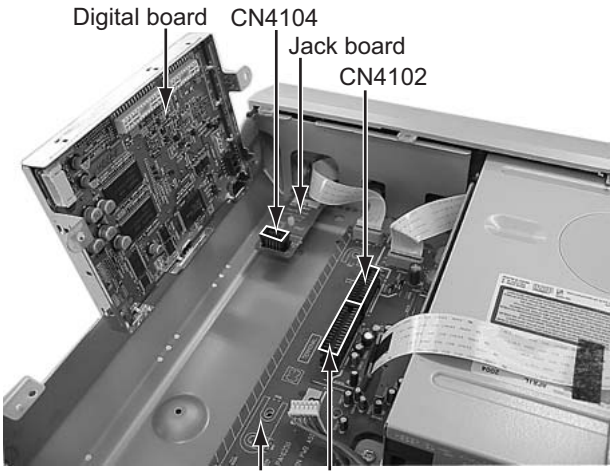


Fig.8

3.1.5 Remove the switching regulator board (See figure 9)

- Prior to performing the following procedure, remove the top cover.
  (1) Disconnect the card wire from connector CN5301 on the switching regulator board.
  (2) Disconnect the socket wire from connector CN5303, CN5305, CN5306, CN5307 on the switching regulator board.
  (3) Disconnect the power cord from connector CN5001 on the switching regulator board.
  (4) Remove the two screws **G** attaching the switching regulator board.
  (5) Four spacers are removed.

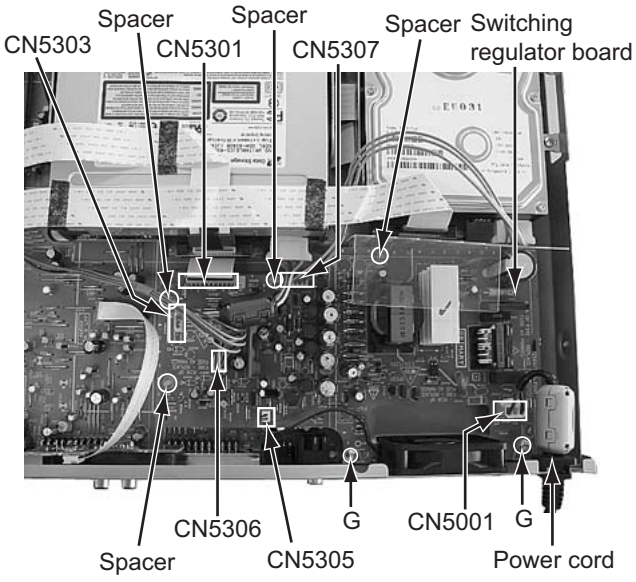


Fig.9

3.1.6 Remove the main board (See figure 10, figure 11)

- Prior to performing the following procedure, remove the top cover, drive unit, digital board, switching regulator board, HDD.
  (1) Disconnect the card wire from connector CN3001, CN3002, CN4001, CN7301 on the main board
  (2) Remove the two screws **H** attaching the main board.
  (3) Remove the seven screws **I** attaching the rear panel with main board.

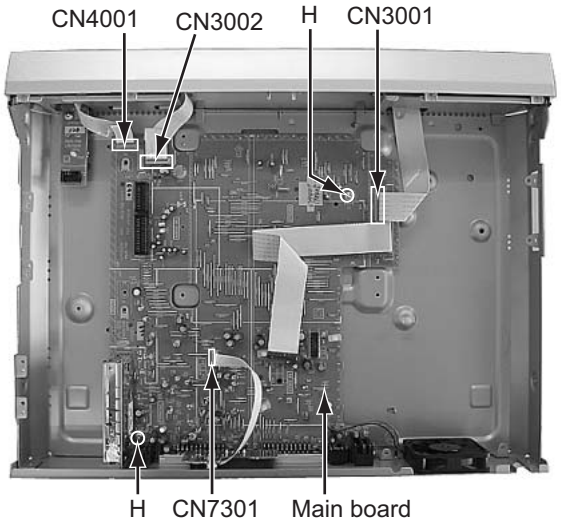


Fig.10

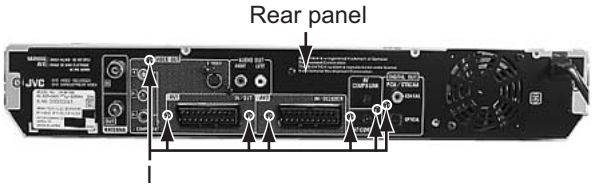


Fig.11

SECTION 4
ADJUSTMENT

4.1 Timer clock adjustment (for only ver.E,ER)

If an error comes to arise for a clock, the following procedure will adjust.

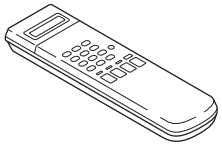
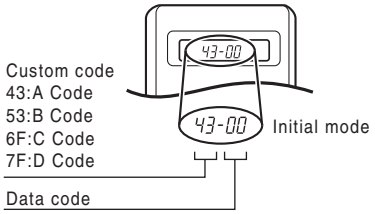
Signal	(A1)	No signal
Mode	(B)	EE
Equipment	(C)	Frequency counter
Measuring point	(D1) (D2) (D3)	IC3001 pin 61 IC3001 pin 17 C3026 + and -
Adjustment part	(F)	C3025 (TIMER CLOCK)
Specified value	(G1)	1024.008 ±0.001 Hz (976.5549 ±0.0010 usec)

(1) Connect the frequency counter to the measuring point (D1).
(2) Connect the short wire between the short point (D2) and Vcc (5V).
(3) Short the leads of capacitor (D3) once in order to reset the microprocessor of the system controller.
(4) Disconnect the short wire between the short point (D2) and Vcc then connect it again.
(5) Adjust the Adjustment part (F) so that the output frequency becomes the specified value (G).

SECTION 5
TROUBLESHOOTING

5.1 JIG Mode

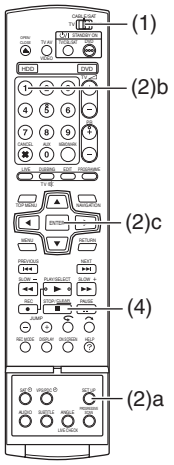
The following remote control units are required to set and cancel JIG mode.
For setting : a remote control unit attached to product.
For cancellation : JIG remote control unit (part number : PTU94023B)

Remote control unit attached to product	JIG remote control unit
	 JIG remote control unit [Data transmission] Set the data code, and then press the ") " 3 button. 

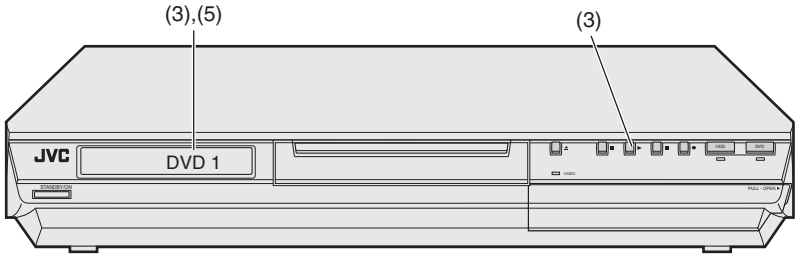
When the main body is set to JIG mode and when the main body is under JIG mode, the remote control unit attached to product operates only in "Remote Control Code 1". Since main body is in "Remote Control Code 3" when it is shipped and just after its batteries are changed, "Remote Control Code 3" needs to be changed to "Remote Control Code 1."

< Changing Remote Control Code >

(1) Switch TV/CABLE/SAT/DVD Switch to "DVD"
(2) Press the numeric button "1" of the remote control unit while pressing the "SET UP" button of the remote control unit. Then, press the "ENTER" button, and then release the "SET UP" button.
(3) Press the "PLAY" button of the main body for five seconds or longer while the main body is in stand-by mode, and a current remote control code of the main body is displayed in FL indicator of the main body.
(4) While keeping the state of (3), press the "STOP" button of the remote control unit toward the main body.
(5) The code that was set by the remote control unit blinks for 5 seconds, before the code is set to the main body. When the FL indicator changes to “DVD 1”, it shows that the Remote Control Code has been changed to “1”.



"(2) a-c" shows the order of pressing the buttons.



5.1.1 Setting JIG mode

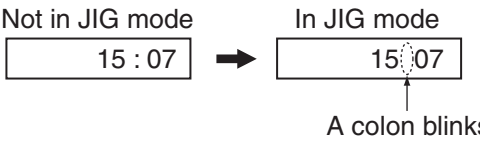
To display SYSTEM INFO or to update firmware, the main body needs to be set to JIG mode.

(1) Turn the main body ON.

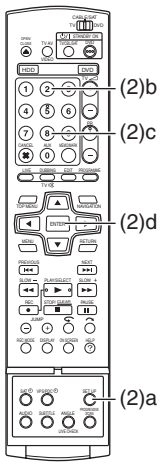
(2) Press the buttons of the remote control unit attached to product in the following order : "SET UP" → "2" → "8" → "ENTER"

(3) When a colon ":" between "hour" and "minute" of a clock in FL indicator blink, it means that the main body has been set to JIG mode properly.

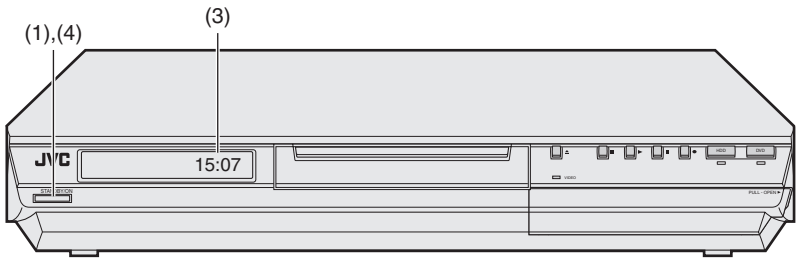
[Example]



(4) Turn the main body OFF, and then turn it ON again.
*Once the main body is set to JIG mode, the JIG mode cannot be cancelled even if the power cord is pulled out from the wall socket.



"(2) a-d" shows the order of pressing the buttons.



5.1.2 Canceling JIG mode

(1) Transmit "43-9D" to the main body by using JIG remote control unit.

(2) A colon ":" between "hour" and "minute" of a clock in FL indicator light.

(3) Turn the main body OFF, and then turn it ON again.

NOTE:

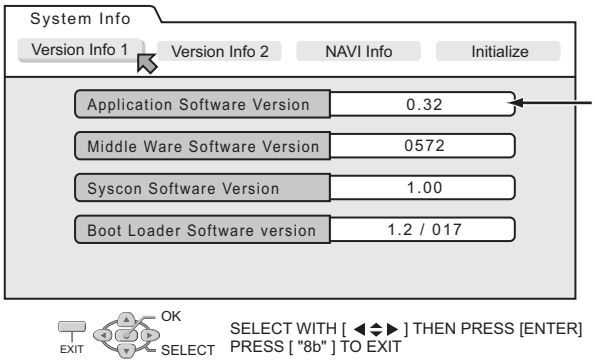
After repair work, be sure to cancel JIG mode. Before returning product to a user, confirm that a colon ":" between "hour" and "minute" of a clock in FL indicator light.

5.2 Displaying SYSTEM INFO

In the SYSTEM INFO there is information including Firmware Versions of the main body and the drive unit.

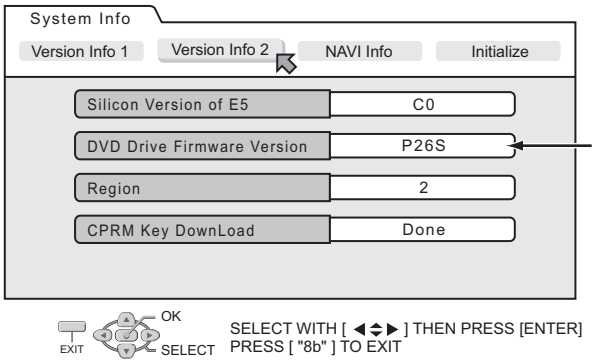
(1) Set the main body to JIG mode.
(2) Transmit "43-8B" to the main body by using JIG remote control unit.
(3) SYSTEM INFO menu is displayed in the television screen.
(4) To move cursor in SYSTEM INFO, use the "▲", "▼", "◀ ", and " ▶" buttons of a remote control unit attached to product.

The example of a display **< Version Info 1 >**



Firmware Version of the main body
When the Firmware of the main body is updated, this part is changed.

The example of a display **< Version Info 2 >**



Firmware Version of the Drive unit
When the Firmware of the drive unit is updated, this part is changed.

NOTE :
Items other than the ones described above are not used in service work.

(5) To quit the SYSTEM INFO menu, transmit "43-8B" to the main body by using JIG remote control unit.
(6) Cancel JIG mode.

5.3 Updating the firmware of the main body

- Firmware update disc supports CD-R media.
- When firmware update is necessary, information is available from the homepage of DIGITAL VIDEO STORAGE CATEGORY, CS group.

5.3.1 Creating an update disc

Please check the details of the update disc creation method by JS-NET.

(1) Down load the update file from JS-NET. The file name is “hdd_u.udx”.

(2) Write the update file into CD-R. Pay attention in the following points when writing the update disc.

- Make sure to write in “Disc at Once”.
- Set the file compatibility to “ISO9660 format”. (ROMEO, JOLIET are disapproved.)
  If the writing method is not correct, the update results in an error.

5.3.2 Update procedure

- There are two methods of updating firmware, using JIG mode <method 1> or not using JIG mode(User update mode) <method 2>. Updating can be operated in either method.

<Method 1>

(1) Set to the JIG mode.

(2) Load the update disc on the tray, and then close the tray.

(3) When the disc reading operation is completed, transmit “43-70” with the JIG remote control unit.
If the update disc is not correct, FL indicator displays an “ERROR” after transmitting “43-70”. Transmit “43-70” once and make the FL indicator to normal display, and then reload the disc then transmit “43-70” again.

(4) “UPDATE” is displayed in the FL indicator, and the FL indicator changes to “FL UPDATE” afterwards. It takes approx. 2 minutes for the change.

(5) Remove the disc as the tray is ejected, and then transmit “43-70” with the JIG remote control unit. Then the FL indicator changes from “UPDATE” to the normal display.

(6) Close the tray and turn the main body OFF. Pull out the power code from the wall socket, then plug the power cord into the wall socket again.

(7) When “LOADING” in the FL indicator disappears, turn the main body ON.

(8) Display the SYSTEM INFO menu, and check the version of the firmware.

(9) Cancel the JIG mode.

<Method 2>

(1) Turn the power ON. Load the update disc on the tray and close the tray.

(2) When the disc reading operation is completed, turn the power OFF.

(3) Keep pressing the “PAUSE” button and the “POWER” button at the same time. (Until FL indicator changes to “UPDATE”).

(4) In approx. 2 minutes the tray is ejected. Remove the disc and close the tray.

(5) Reset operation is carried out automatically, and it becomes standby condition.

(6) Then, display the SYSTEM INFO menu in the JIG mode and check the version.

5.4 Updating the firmware of the drive unit

- Firmware update disc supports only DVD-RAM media.
- When firmware update is necessary, written discs are distributed by DIGITAL VIDEO STORAGE CATEGORY, CS group.
  (1) Turn the main body ON.
  (2) Load the update DVD-RAM disc on the tray and close the tray.
  (3) “READING” is displayed in the FL indicator and the update is started.
  (4) In a short while “READING” in the FL indicator disappears, open the tray to remove the disc and close the tray.
  (5) Turn the power OFF and pull out the power code from the wall socket, then plug the power cord into the wall socket again.
  (6) Set to the JIG mode and check the firmware version of the drive.

5.5 Taking out a disc

<Method 1 >

There is a forced tray eject mode with electrical operation.

(1) Right after plugging in the power code (while “LOADING” is displayed), keep pressing the OPEN/CLOSE button of the main body.
(2) Remove the disc as the tray is ejected in a short while.
(3) Make sure to close the tray afterwards.

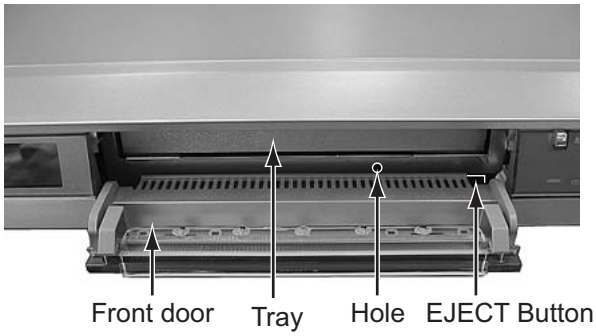
<Method 2 >

When the disc cannot be removed by operating above <Method 1 >, open the front door of the main body manually and directly press the EJECT button located in the lower right of the drive unit.

<Method 3 >

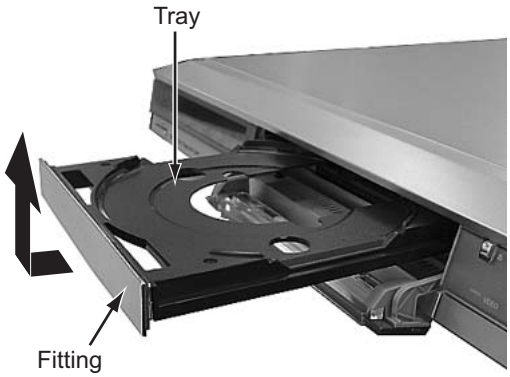
When neither <Method 1> nor <Method 2> can remove the disc, the tray can be ejected mechanically without turning the power on.

(1) Open the front door of the main body manually.
(2) Insert a fine wire (e.g. a straightened paper clip) into the hole in the lower part of the tray of the drive unit.
(3) As the tray ejects a little, pull out the tray manually.



5.6 Exchanging the fitting

As the fitting that comes with the service drive unit cannot be used, make sure to attach a service fitting when the drive unit is exchanged. The fitting that is removed from the old drive unit can be attached to the new drive unit.
The fitting can be removed by pulling upwards while opening out the lower part of the fitting outwards.



5.7 Initialization to the factory shipment state

When the initialization is operated, internal information changes as follows. It is essential to obtain the client's permission before the operation.

- All DVD library is all deleted.
- All the DVD initial settings go back to the initial status.
  (1) Set to the JIG mode.
  (2) Transmit "43-6F" with the JIG remote control unit.
  (3) FL indicator displays "FACTORY", and changes to "CHECK OK" after blinking for a short while.
  (4) Pull out the power code from the wall socket.
  (5) The JIG mode is forced to cancel at the same time with the initialization, check whether the JIG mode is canceled by plugging the power code into the wall socket again. (The colon ":" in time display should be continuously ON, not blinking.)
  If the JIG mode is not canceled, transmit "43-9D" with JIG remote control unit to cancel the JIG mode.

5.8 Setting after the drive unit replacement

When the drive unit is replaced, it is necessary to set a region code. Service drive units for replacement are not set for any region code, and they are in an indefinite condition.
Make sure to set region code after attaching the drive unit to the main body.
Without the setting of the region code, discs that have regions cannot be played back.

5.8.1 Creating a region setting disc.

Please check the details of the region setting disc creation method by JS-NET.

(1) Download the region setting file from JS-NET. The file name is "region.bin".
(2) Write the region setting file into CD-R. Pay attention in the following points when writing the file into CD-R.
  - Make sure to write in "Disc at Once".
  - Set the file compatibility to "ISO9660 format". (ROMEO, JOLIET are disapproved).
    If the writing method is not correct, the normal setting cannot be performed.

5.8.2 Setting the region

(1) Set for the JIG mode.
(2) Load the region setting disc on the tray, and then close the tray.
(3) When the disc reading operation is completed, transmit "43-70" with the JIG remote control unit.
(4) FL indicator changes to "UPDATE". Remove the disc as the tray will open for a few seconds.
(5) Then, check whether the FL indicator is "REGION 2".
(6) Transmit "43-70" with the JIG remote control unit. When FL indicator changes to "OPEN", close the tray.
(7) Turn the power OFF, and pull out the power code, and then plug the power code in again.
(8) Cancel the JIG mode.

JVC

SCHEMATIC DIAGRAMS

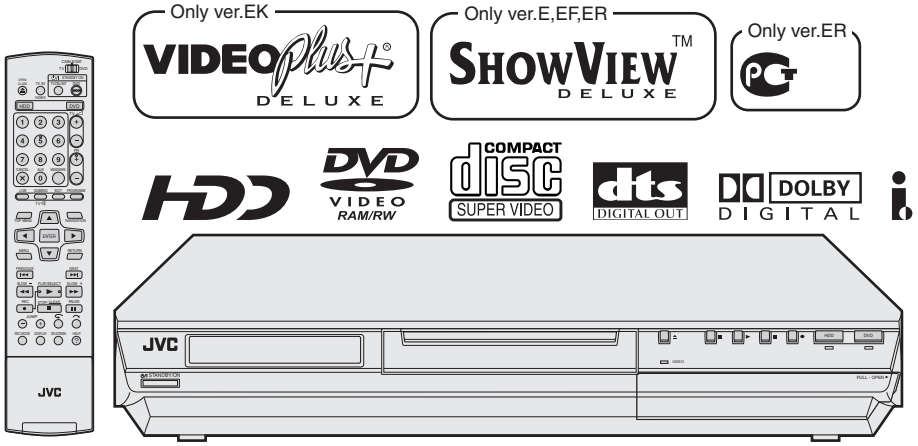
DVD & HDD VIDEO RECORDER

DR-MH20SE, DR-MH20SEK, DR-MH20SEF
DR-MH30SE, DR-MH30SEK
DR-MH30SEF, DR-MH30SER

CD-ROM No.SML200409

Area Suffix

EK ---------- U.K.
EF ---------- France
ER ---- Russian Federation
E ------- Continental Europe
Northern Europe



DR-MH20SE, DR-MH20SEK, DR-MH20SEF [D4HR20]
DR-MH30SE, DR-MH30SEK, DR-MH30SEF, DR-MH30SER [D4HR25]

Since the whole mechanism assembly unit is replaced, the DVD recorder mechanism of this unit need not be adjusted.

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No.YD027SCH
2004/9

CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions
The Components indentified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K: KΩ(1000Ω), M: MΩ (1000KΩ)
2) All capacitance values are in μF, (P: PF).
3) All inductance values are in μH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

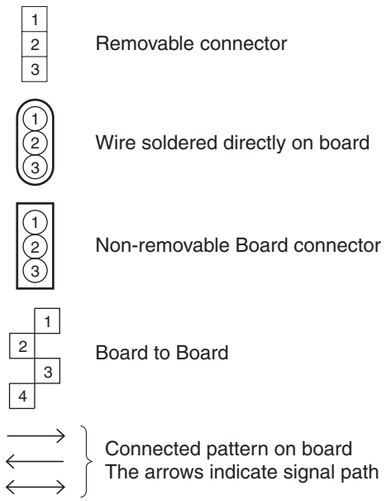
Note: The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

2. Indications of control voltage

AUX : Active at high.

$\overline{\text{AUX}}$ or AUX(L) : Active at low.

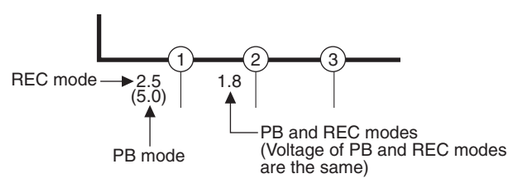
3. Interpreting Connector indications



Note: For the destination of each signal and further line connections that are cut off from the diagram, refer to "BOARD INTERCONNECTIONS"

4. Voltage measurement

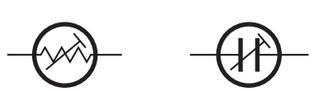
1) Regulator (DC/DC CONV) circuits
   REC : Colour bar signal.
   PB : Alignment tape (Colour bar).
   — : Unmeasurable or unnecessary to measure.
2) Indication on schematic diagram
   Voltage indications for REC and PB mode on the schematic diagram are as shown below.



Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.

CIRCUIT BOARD NOTES

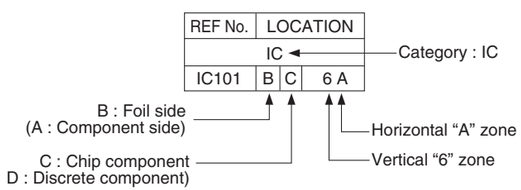
1. Foil and Component sides

1) Foil side (B side) :
   Parts on the foil side seen from foil face (pattern face) are indicated.
2) Component side (A side) :
   Parts on the component side seen from component face (parts face) indicated.

rts location are indicated by guide scale on the circuit board.

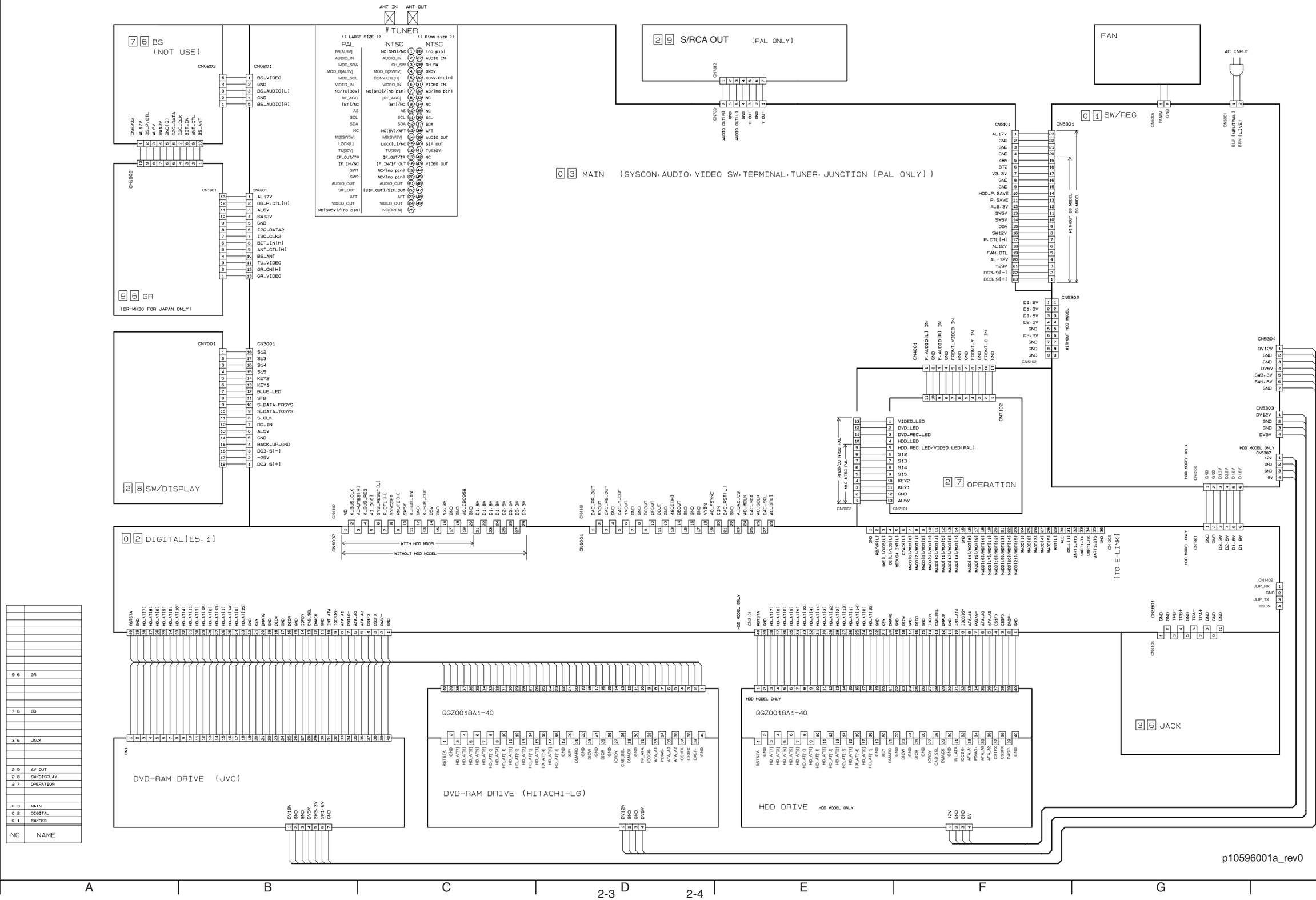
2. Parts location guides

Parts location are indicated by guide scale on the circuit board.



Note: For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

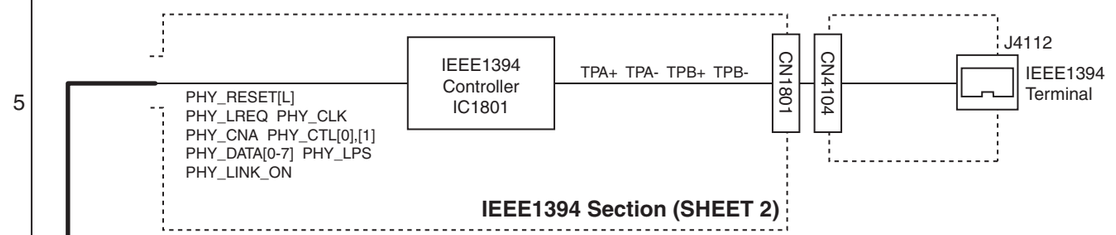
Wiring diagram

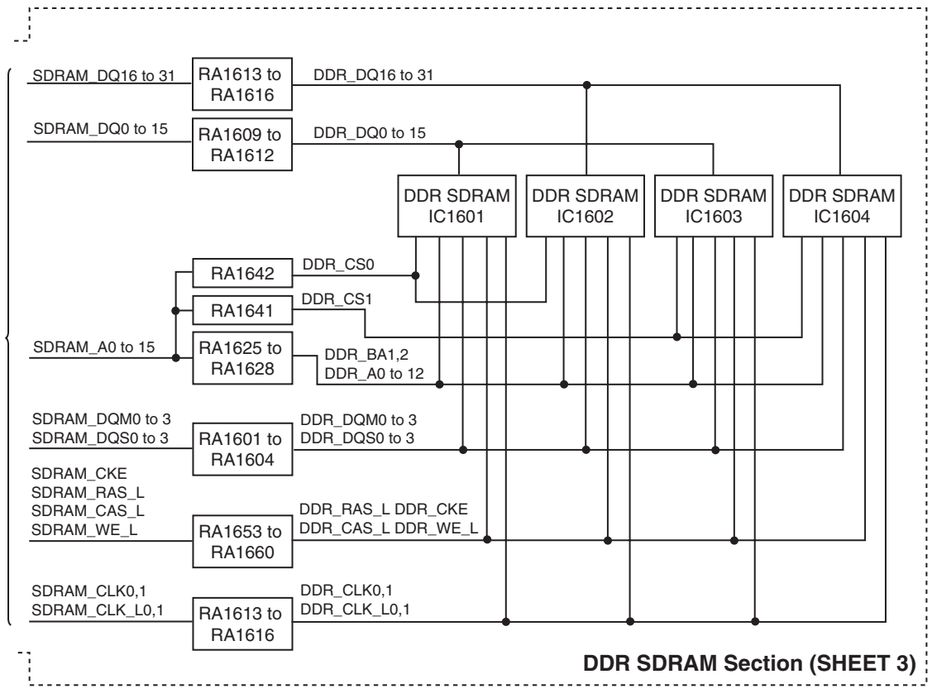


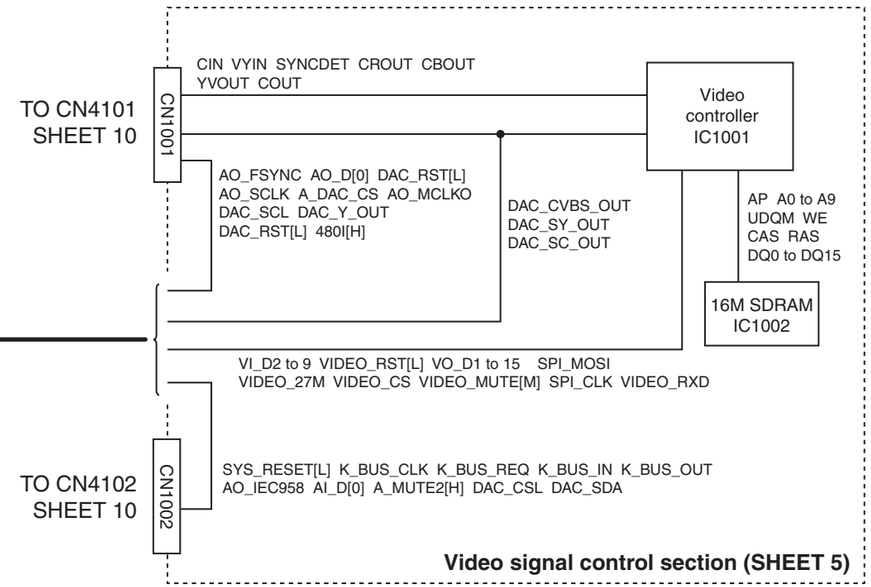
p10596001a_rev0

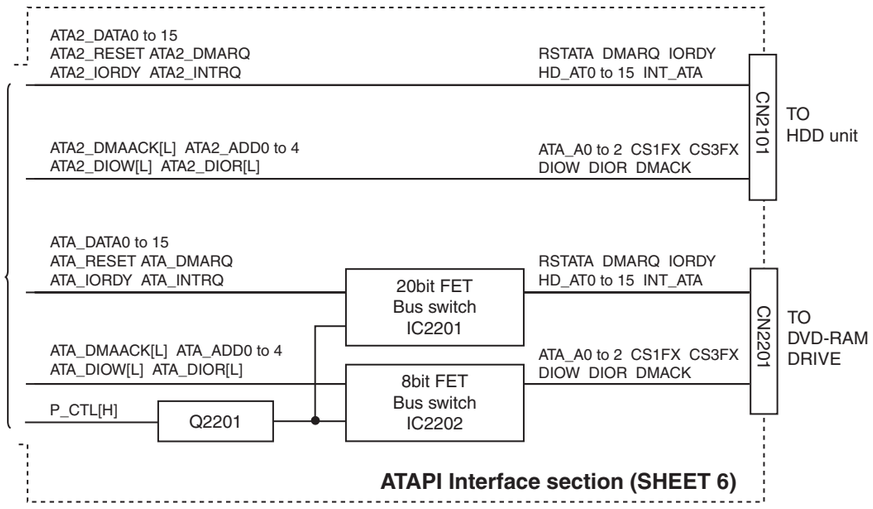
Block diagrams

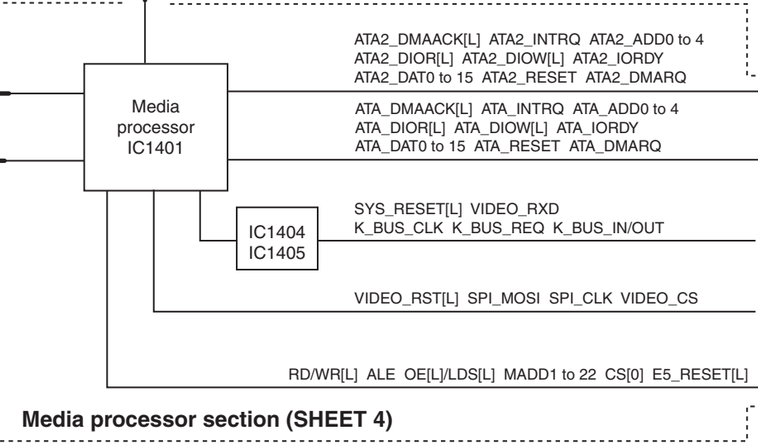
■ DIGITAL 0 2

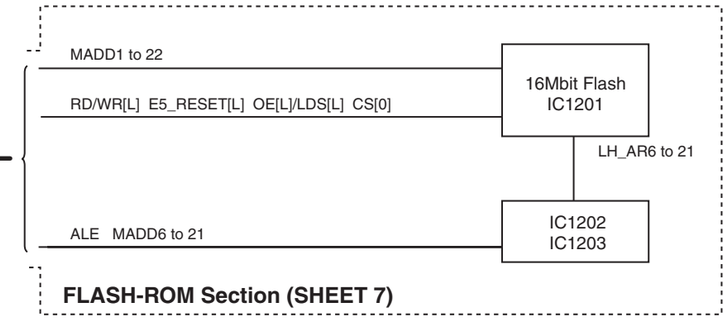









Media processor IC1401
ATA2_DMAACK[L] ATA2_INTRQ ATA2_ADD0 to 4
ATA2_DIOR[L] ATA2_DIOW[L] ATA2_IORDY
ATA2_DAT0 to 15 ATA2_RESET ATA2_DMARQ
ATA_DMAACK[L] ATA_INTRQ ATA_ADD0 to 4
ATA_DIOR[L] ATA_DIOW[L] ATA_IORDY
ATA_DAT0 to 15 ATA_RESET ATA_DMARQ
IC1404 IC1405
SYS_RESET[L] VIDEO_RXD
K_BUS_CLK K_BUS_REQ K_BUS_IN/OUT
VIDEO_RST[L] SPI_MOSI SPI_CLK VIDEO_CS
RD/WR[L] ALE OE[L]/LDS[L] MADD1 to 22 CS[0] E5_RESET[L]
Media processor section (SHEET 4)



■ MAIN 0 3

Audio signal control section (SHEET 8)

TO SHEET 11

AUDIO_OUT1[L/R]

Muting
Q8201,Q8202

A_MUTE2[H]

DEC_OUT[L/R]
LINE_OUT[L/R]

IC8301
IC8302

IC8202

AOUTL ±
AOUTR ±

DAC_SDA
DAC_SCL
A_DAC_CS
DAC_RST[L]
AO_D[0]

2chDA converter
IC8201

AUDIO_IN1[L/R]
AUDIO_IN2[L/R]

F_AUDIO[L/R]

24bit
A/D
combatr
IC8001

AO_SCLK AO_FSYNC AO_MCLKO

AI_D[0]

TU_AUDIO[L/R]

AV1_L
AV2_H

A_MUTE1[H]

AO_IEC958

J8401
Optical digital
OUT

J8501
COAXIAL OUT

IC8501

ACD_RST[L]
I2C_CLK2 I2C_DATA2

TO SHEET 13

Audio / video signal input control section (SHEET 9)

TO CN7102
SHEET 14

CN4001

F_AUDIO[L/R]

Video controller
IC4001

REAR1_C_IN REAR 1_YV_IN
REAR2_C_IN REAR 2_YV_IN

YTODIGI CTODIGI

FRONT_VIDEO
FRONT_Y_IN
FRONT_C_IN

I2C_DATA_A/V I2C_CLK_A/V

SYNC_DET
I2C_CLK2 I2C_DATA2

IC4201

IC4301

SECAM_DET[H] SEPA_IN[H]

SYNC+BGP.IN

SECAM
IC4304

HD_FROM_PDC

TU_VIDEO

Input/output relay section(SHEET 10)

TO CN1001
SHEET 5

CN4101

RCOUT COUT 480I[H] RYOUT YVOUT CBOUT CROUT

AO_FSYNC AO_D[0] DAC_RST[L] AO_SCLK A_DAC_CS AO_MCLKO
DAC_SCL DAC_SDA

TO CN1002
SHEET 5

CN4102

YTODIGI CTODIGI

AI_D[0] A_MUTE2[H] AO_IEC958

K_BUS_REQ K_BUS_OUT K_BUS_CLK K_BUS_IN SYS_RESET[L]
P_MUTE[H] P_CTL[H] SYNC_DET VD

TO CN5301
SHEET 1

CN5101

FAN_CTL P.CTL[H] P.SAVE

J4109
AV COMPULINK

R.PAUSE

SAT CONTROL

SAT_CTL

Input/output terminal section (SHEET 11)

L-1 SCART Terminal

J7301

RAPID_SW BIAS/RGB_CTL

Q7310 to
Q7312

4_3[H] P50_I/O AV_YC_IN[H] TV[H]

AV1_L

SWITCH
IC7302

SCR_ID

AV2_H RGB_TH[H]

SWITCH
IC7303 to IC7306

VMUTE[L]

V_OUT

R
G
B

CROUT CBOUT
COUT YVOUT

480I[L] RCOUT RYOUT

REAR1_C_IN

REAR1_YV_IN

REAR2_C_IN

REAR2_Y_IN

J7302

L-2 SCART Terminal

J7308
S-VIDEO

J7307
AUDIO OUT

FW7301

CN7301

LINE_OUT[L/R]
AUDIO_IN1[L/R]

AUDIO_OUT1[L/R]

R
G
B
V_OUT

Video driver
IC7301

TO
SHEET 8

J7309
COMPONENT
VIDEO OUT

DEC_OUT[L/R] AUDIO_IN2[L/R]

System controller section(SHEET 12)

SCR_ID 4_3[H] RGB_TH[H] AV1_YC_IN[H] BIAS/RGB_CTL AV1_L AV2_H
RAPID_SW V_MUTE[L] TV[H] P50_I/O

P.MUTE[H] K_BUS_OUT SYS_RESET[L] K_BUS_IN P_CTL[H] K_BUS_CLK FAN_CTL
K_BUS_REQ SYNC_DET VD R.PAUSE SAT_CTL P.SAVE

ADC_RST[L] A_MUTE[H] AV1_L AV2_H I2C_CLK2 I2C_DATA2

SYNC_DET I2C_DATA_A/V I2C_CLK_A/V
SECAM_DET[H] I2C_DATA2 I2C_CLK2 SEPA_IN[H]

I2C_DATA2 I2C_CLK2 TU_DATA TU_CLK
TU_V_MUTE[H] SW1 SW2 AFC RF_AGC

System controller
IC3001

STB RC_IN S_CLK
LED_OUT
S_DATA_TOSYS
S_DATA_FRSYS

HDD_REC_LED
HDD_LED
DVD_REC_LED
DVD_LED
VIDEO_LED

CN3001

CN3002

TO CN7001
SHEET 14

TO CN7101
SHEET 14

Tuner section(SHEET 13)

TU_V_MUTE[H]

Muting
Q6031

TU_VIDEO

VIDEO_OUT

Tuner
TU6001

TV Multiplex
sound processor
IC6701

TU_AUDIO[L/R]

TO SHEET 8

TU_DATA
TU_CLK

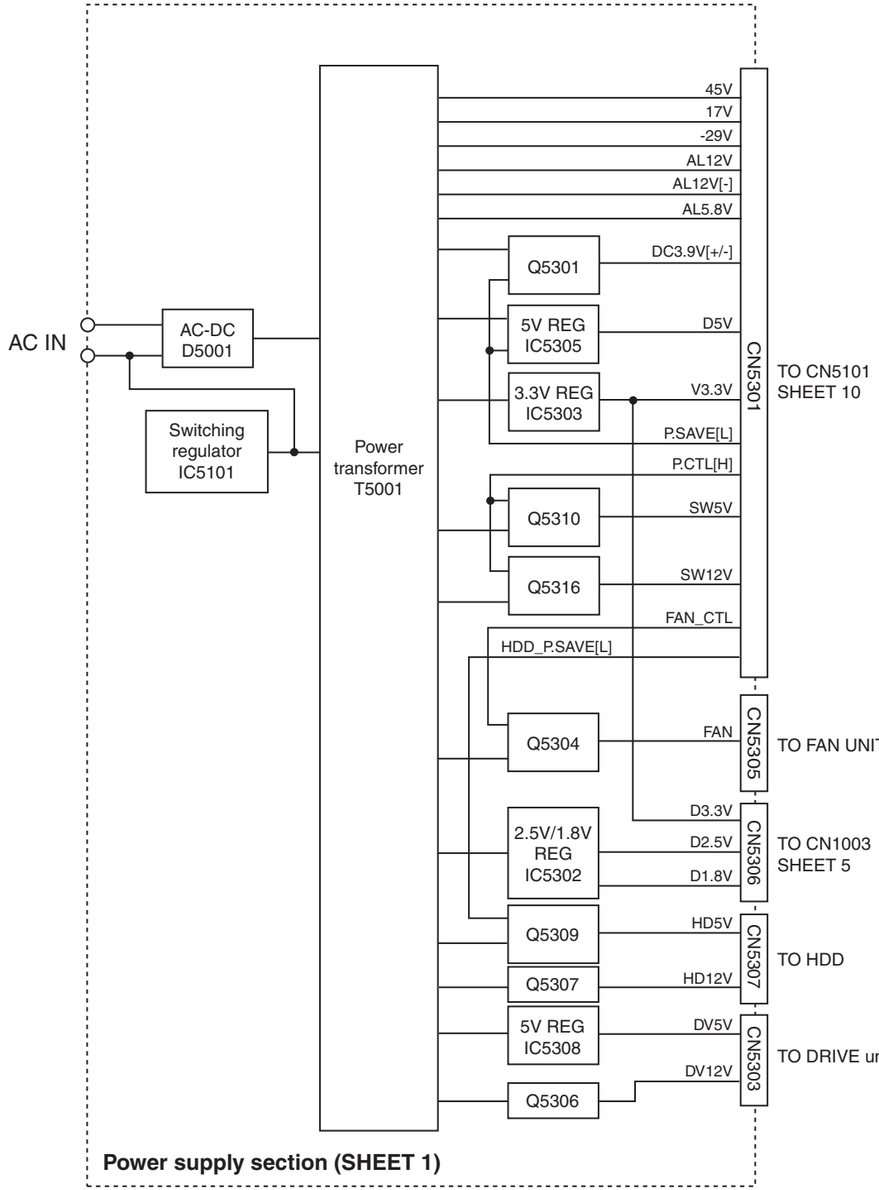
AFC RF_AGC
SW1 SW2

I2C_DATA2 I2C_CLK2

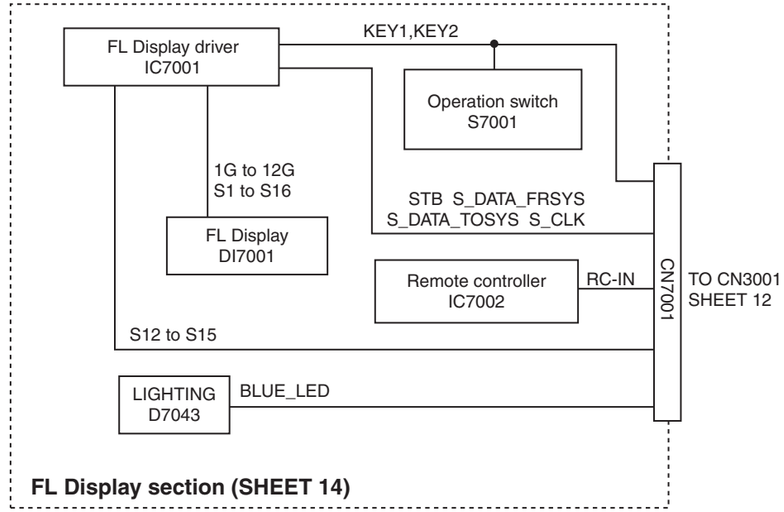
A B C D E F G

2-7 2-8

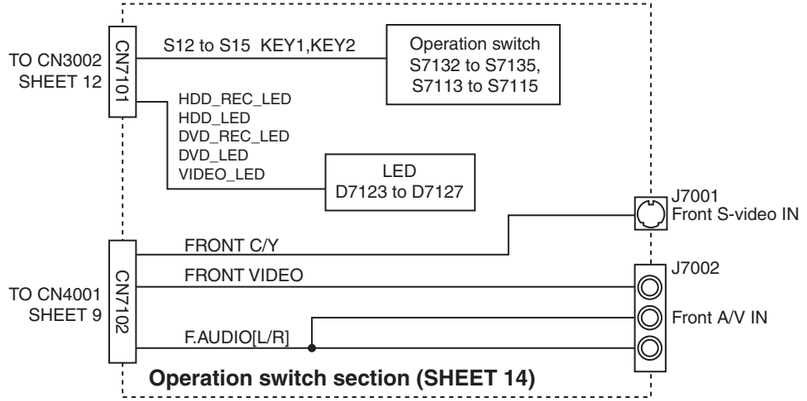
■ SW.REG 0 1



■ SW/DISPLAY 2 8

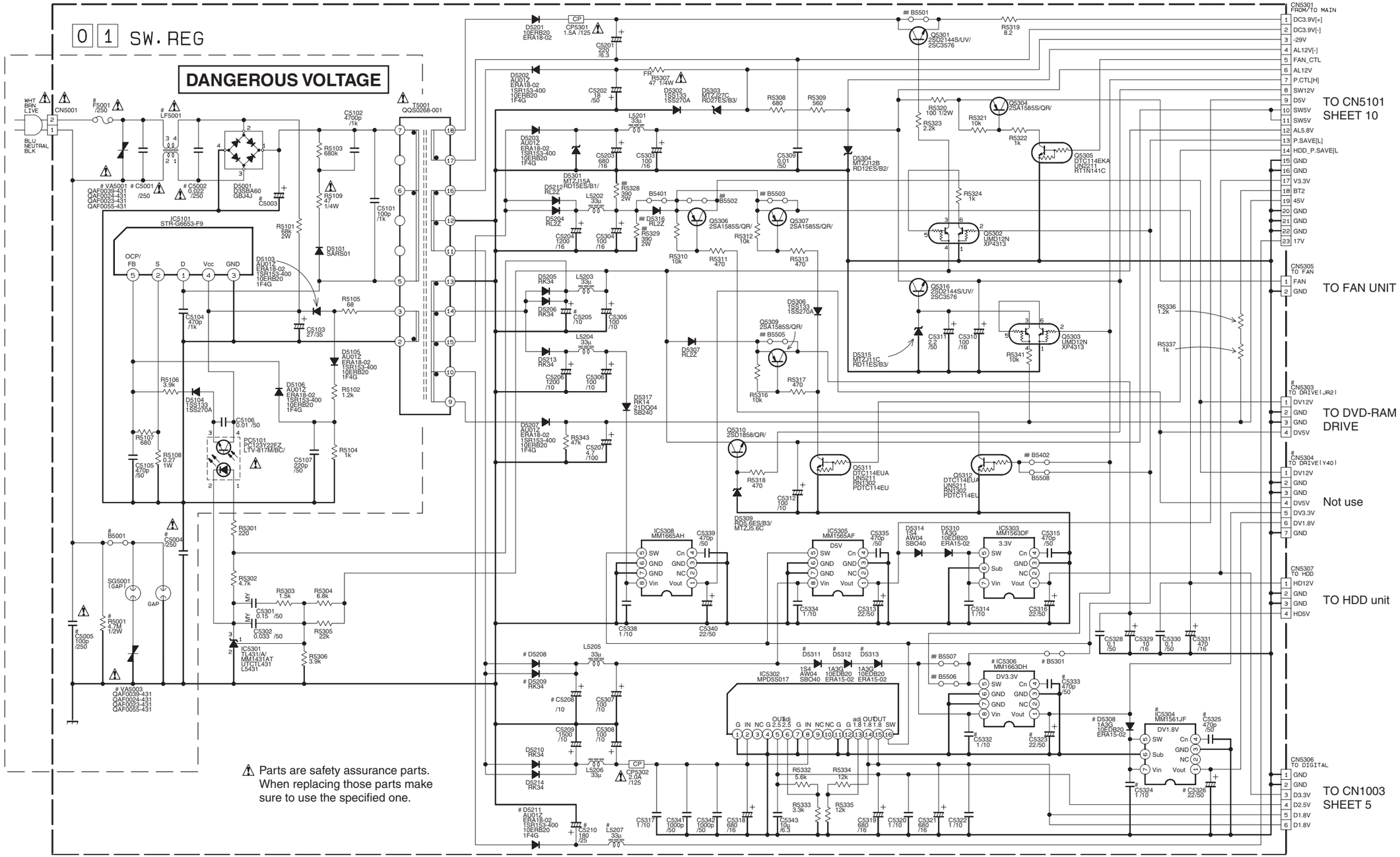


■ OPERATE 2 7



Standard schematic diagrams

■ Power supply section



⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

##MARK ELEMENTS ARE NOT MOUNTED.

#DIFFERENCE TABLE 1

	B5301 C5326 D5308 IC5304 C5323 C5332 D5311 IC5306 C5324 C5331 D5312 C5325 D5209 D5313	CN5303	CN5304	C5208	D5208
Y40 DRIVE	YES	NO	YES	1200	RK34
JR2 DRIVE	NO	YES	NO	1000	RK14 21DQ04 SB240

#DIFFERENCE TABLE 2

	B5001	C5001	C5002	C5003	C5004	C5005	F5001	R5001	LF5001	VA5001	VA5003
JPN	YES	0.047	NO	330 /200	4700p	YES	1.6A	NO	GQR0908-001 GQR0964-001 GQR1215-001	YES	YES
US								YES			
AUTO NTSC	NO	0.068	YES	100 /400	2200p	NO	T2AL	NO	GQR1031-001	NO	NO
AUTO PAL											
EURO											

#DIFFERENCE TABLE 3

	C5205
GR	1500
W/O	2700
WITH	

#DIFFERENCE TABLE 4

	C5210 D5211 L5207
BS	NO
W/O	YES
WITH	

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MY MYLER
N NON POLAR

* Refer to the "JR2 DRIVE" column of a table for this model.

p20405001a_rev0

SHEET 1

■ IEEE1394 Section

0 2 DIGITAL (1394_PHY)

FROM/TO MEDIA_PROCESSOR

D3.3V
PHY_RESET[L]
PHY_LREQ
PHY_CLK
PHY_CNA
PHY_CTL[0]
PHY_CTL[1]
PHY_DATA[0-7]
PHY_LPS
PHY_LINK_ON
GND

TO SHEET 4

PHY_DATA[0-7] → PHY_DATA[0] … PHY_DATA[7]

B1802 SHORT
B1801
D3.3V
C1806 10/6.3
L1802 10µ
L1801 10µ
C1804 0.1
C1803 10/6.3
C1814 OPEN
C1813 OPEN
C1805 0.1
R1820 10k
C1810 OPEN
K1801 SHORT
2125
C1809 12p
C1808 12p
X1801 NAX0551-001X or NAX0666-001X
24.576M
C1807 0.1
R1822 0ohm
IC1801 TSB41AB2PAP

64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	
DGND	DGND	DVDD	DVDD	XO	XI	PLLGND	PLLGND	PLLVDD	NC	NC	RESET	AVDD	AVDD	AGND	AGND	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
LREQ	SYSCLK	CNA	CTL0	CTL1	D0	D1	D2	D3	D4	D5	D6	D7	PD	LPS	NC	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
DGND	DGND	C/LKON	PC0	PC1	PC2	ISO	CPS	DVDD	DVDD	TESTM	BRIDGE	TEST0	AVDD	AVDD	AGND	
48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	
AGND	NC	NC	NC	NC	AVDD	R1	R0	AGND	TPBIAS0	TPA0+	TPA0-	TPB0+	TPB0-	AGND		

R1801 0ohm
R1802 0ohm
R1805 0ohm
R1807 10k
R1808 # OPEN
R1806 # OPEN
R1809 10k
R1810 390k
C1811 0.1
R1811 OPEN
R1821 1k
R1812 0ohm
C1812 0.1
RA1801 10k
RA1802 10k
R1803 10k
R1804 10k

R1819 750 _0.5%
R1818 5.6k _0.5%
R1813 56
R1814 56
R1815 56
R1816 56
C1801 1
C1802 270p
R1817 5.1k

T1801 NQR0444-001X
TPA+
TPA-
TPB+
TPB-

CN1801 QGB2027L1-10X
10 GND
9 GND
8 GND
7 TPA+
6 TPA−
5 GND
4 TPB+
3 TPB−
2 GND
1 GND

TO CN4104 SHEET 10

GND

#Parts are not attach

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.
ALL DIODES ARE 1SS355

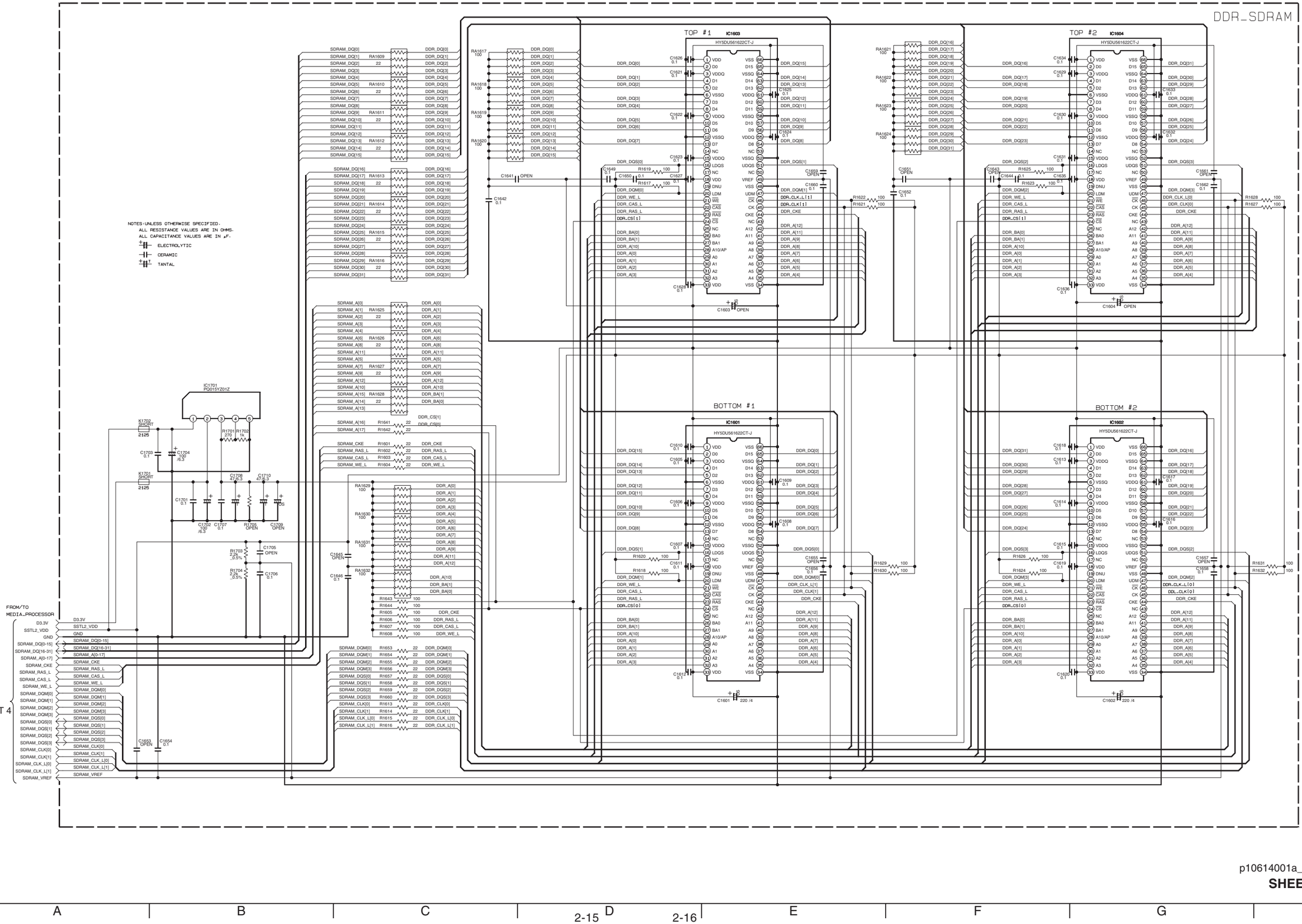
ELECTROLYTIC
CERAMIC
TANTAL

p30124001a_rev0

SHEET 2

2-13 2-14

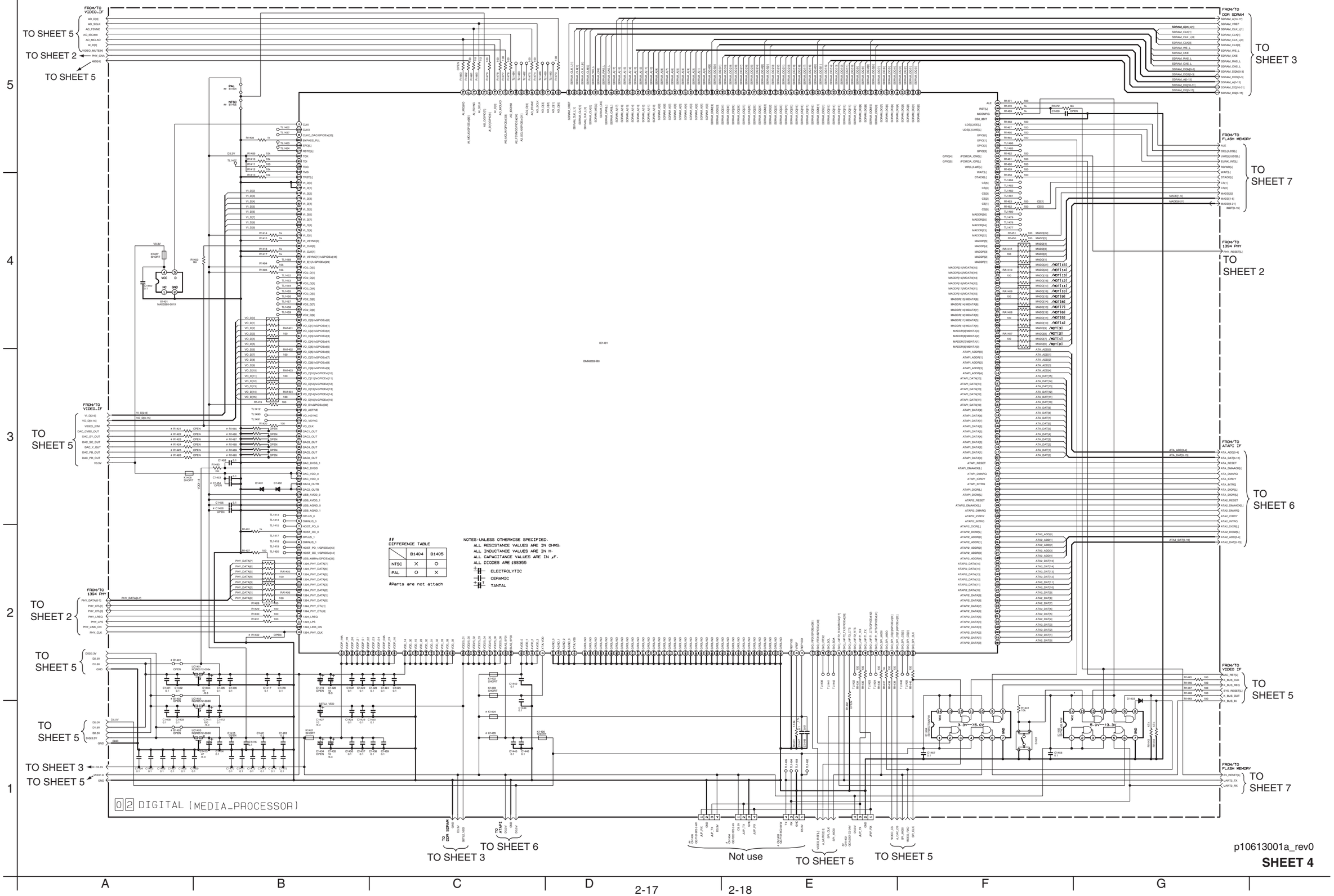
■ DDR SDRAM Section



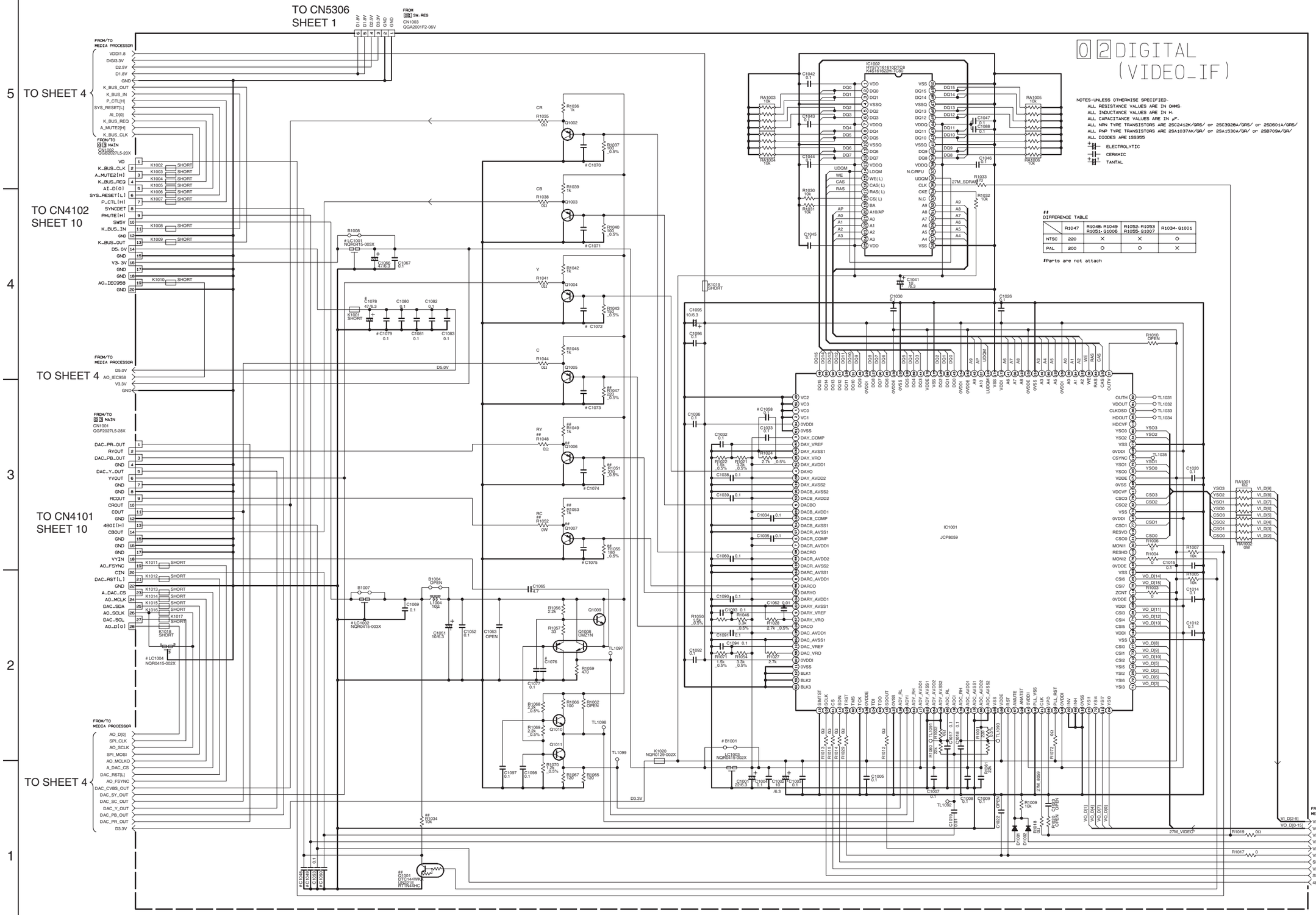
p10614001a_rev0

SHEET 3

■ Media processor section



■ Video signal control section

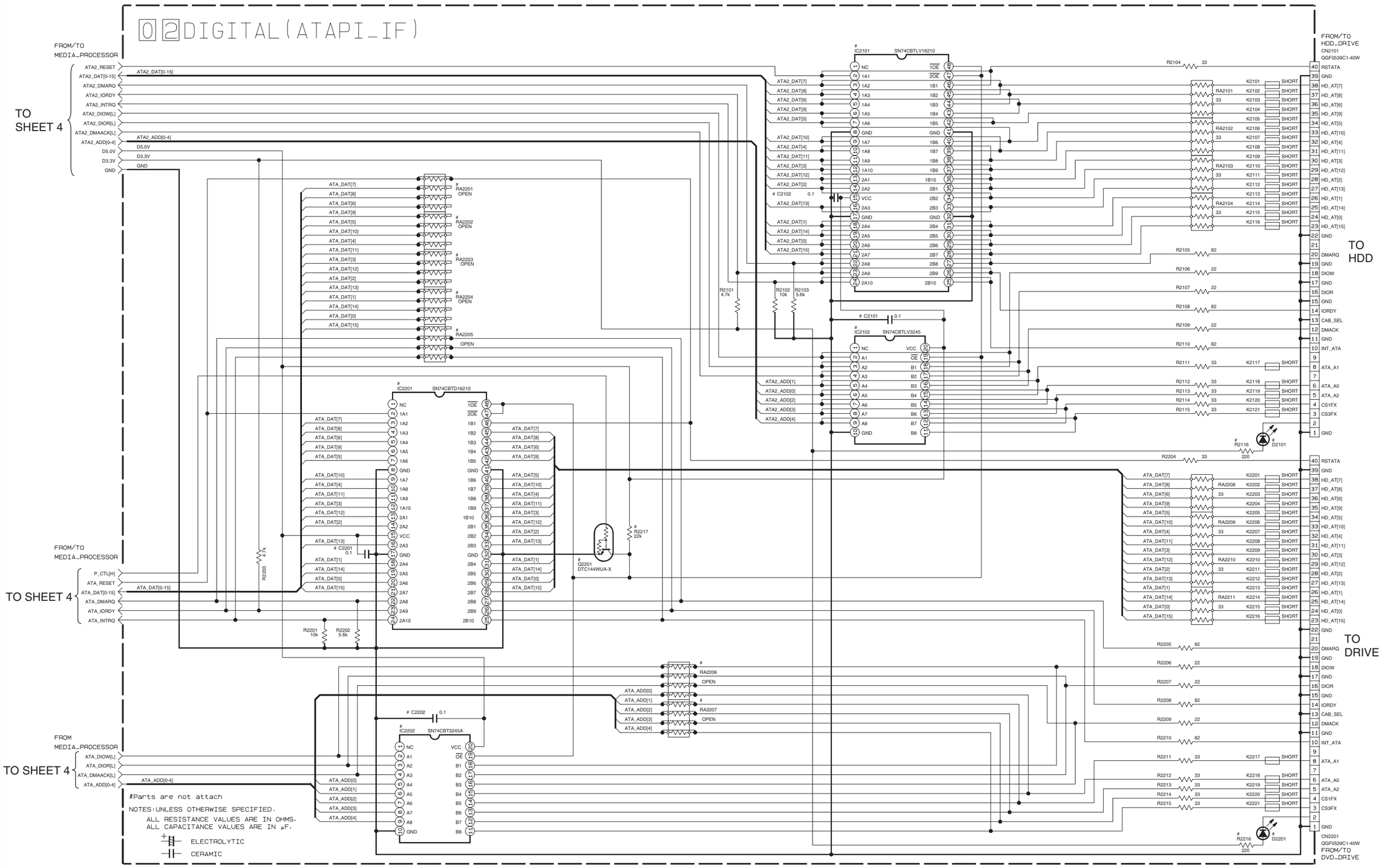

02 DIGITAL (VIDEO_IF)
TO CN5306 SHEET 1
TO SHEET 4
TO CN4102 SHEET 10
TO CN4101 SHEET 10
TO SHEET 4
TO SHEET 4
TO SHEET 4
IC1002 HY57V161610DTC8 K4S161622H-TC80
IC1001 JCP8059
NOTES-UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.
ALL NPN TYPE TRANSISTORS ARE 2SC2412K/GRS/ or 2SC3928A/GRS/ or 2SD601A/GRS/
ALL PNP TYPE TRANSISTORS ARE 2SA1037AK/GR/ or 2SA1530A/GR/ or 2SB709A/GR/
ALL DIODES ARE 1SS355
ELECTROLYTIC
CERAMIC
TANTAL
DIFFERENCE TABLE
R1047 | R1048-R1049 R1051-Q1006 | R1052-R1053 R1055-Q1007 | R1034-Q1001
NTSC 220 × × ○
PAL 200 ○ ○ ×
#Parts are not attach
TO SHEET 4

p10612001a_rev0

SHEET 5

2-19 2-20

■ ATAPI Interface section



p20418001a_rev0

SHEET 6

■ FLASH-ROM Section

IC1201 64M/32M/16M/8M

	R1216	B1202	B1203	B1204	R1223	R1224	
64Mbit	○	×	○	○	○	○	
32Mbit	×	○	○	×	×	○	
16Mbit	×	○	×	×	×	×	
8Mbit	×	×	×	×	×	×	

IC1201 MBL16TM90TN — 16Mbit FLASH MEMORY

1	LH_AR[16]	A15	A16	48	LH_AR[17]
2	LH_AR[15]	A14	VCCQ	47	
3	LH_AR[14]	A13	VSS	46	
4	LH_AR[13]	A12	DQ15	45	MADD[21] /MDT[15]
5	LH_AR[12]	A11	DQ7	44	MADD[13] /MDT[7]
6	LH_AR[11]	A10	DQ14	43	MADD[20] /MDT[14]
7	LH_AR[10]	A9	DQ6	42	MADD[12] /MDT[6]
8	LH_AR[9]	A8	DQ13	41	MADD[19] /MDT[13]
9		A21	DQ5	40	MADD[11] /MDT[5]
10	LH_AR[21]	A20	DQ12	39	MADD[18] /MDT[12]
11		WE	DQ4	38	MADD[10] /MDT[4]
12	R1222 0Ω	RESET	VCC	37	
13	# R1223 4.7k	ACC	DQ11	36	MADD[17] /MDT[11]
14	# R1224 4.7k	WP	DQ3	35	MADD[9] /MDT[3]
15	LH_AR[20]	A19	DQ10	34	MADD[16] /MDT[10]
16	LH_AR[19]	A18	DQ2	33	MADD[8] /MDT[2]
17	LH_AR[18]	A17	DQ9	32	MADD[15] /MDT[9]
18	LH_AR[8]	A7	DQ1	31	MADD[7] /MDT[1]
19	LH_AR[7]	A6	DQ8	30	MADD[14] /MDT[8]
20	LH_AR[6]	A5	DQ0	29	MADD[6] /MDT[0]
21	LH_AR[5]	A4	OE	28	
22	LH_AR[4]	A3	VSS	27	
23	LH_AR[3]	A2	CE	26	
24	LH_AR[2]	A1	A0	25	

LH_AR[1]

LH_AR[22]

K1201 SHORT 160B

C1203 0.1

C1204 47/6.3

R1216 100

B1203

B1202

B1204

R1225 10k

R1226 4.7k

IC1203 SN74LVC373APW-X — C1207 0.1

LH_AR[14]	OE	VCC	LH_AR[21]
MADD[14] /MDT[8]	Q0	Q7	MADD[21] /MDT[15]
MADD[15] /MDT[9]	D0	D7	MADD[20] /MDT[14]
LH_AR[15]	D1	D6	LH_AR[20]
LH_AR[16]	Q1	Q6	LH_AR[19]
MADD[16] /MDT[10]	Q2	Q5	MADD[19] /MDT[13]
MADD[17] /MDT[11]	D2	D5	MADD[18] /MDT[12]
LH_AR[17]	D3	D4	LH_AR[18]
	Q3	Q4	
	GND	LE	

IC1202 SN74LVC373APW-X — C1206 0.1

LH_AR[6]	OE	VCC	LH_AR[13]
MADD[6] /MDT[0]	Q0	Q7	MADD[13] /MDT[7]
MADD[7] /MDT[1]	D0	D7	MADD[12] /MDT[6]
LH_AR[7]	D1	D6	LH_AR[12]
LH_AR[8]	Q1	Q6	LH_AR[11]
MADD[8] /MDT[2]	Q2	Q5	MADD[11] /MDT[5]
MADD[9] /MDT[3]	D2	D5	MADD[10] /MDT[4]
LH_AR[9]	D3	D4	LH_AR[10]
	Q3	Q4	
	GND	LE	

FROM/TO MEDIA_PROCESSOR

TO SHEET 4

MADD[22]
D3.3V
GND
UART2_RX
UART2_TX
CS[0]
CS[1]
ALE
E5_RESET[L]
MADD[1-5]
MADD[6-21]

MADD[1-5]
MADD[6-21] /MDT[0-15]

MADD[1] R1217 100 LH_AR[1]
MADD[2] R1218 100 LH_AR[2]
MADD[3] R1219 100 LH_AR[3]
MADD[4] R1220 100 LH_AR[4]
MADD[5] R1221 100 LH_AR[5]

RA1201 10k
RA1202 10k
RA1203 10k
RA1204 10k

TL1227 MADD[13]
TL1226 MADD[12]
TL1225 MADD[11]
TL1224 MADD[10]
TL1223 MADD[9]
TL1222 MADD[8]
TL1221 MADD[7]
TL1220 MADD[6]

#Parts are not attach

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC

FROM/TO MEDIA_PROCESSOR

TO SHEET 4

DTACK[L]
WAIT[L]
ELINK_INT[L]
OE[L]/LDS[L]
UWE[L]/UDS[L]
RD/WR[L]

D3.3V
R1229 4.7k
R1230 4.7k
R1231 4.7k
C1208 OPEN
TL1217
B1207 OPEN
B1208

TL1215 TL1216
B1205 OPEN
R1227 100
R1228 100
B1206 OPEN

to/from ELINK BOARD

CN1202

36	GND	
35	UART2_CTS	/MADD[22]
34	UART2_RX	
33	UART2_TX	
32	UART2_RTS	/CS_L[0]
31	CS_L[1]	
30	ALE	
29	RST[L]	
28	MADD[5]	
27	MADD[4]	
26	MADD[3]	
25	MADD[2]	
24	MADD[1]	
23	MADD[21]/MDT[15]	
22	MADD[20]/MDT[14]	
21	MADD[19]/MDT[13]	
20	MADD[18]/MDT[12]	
19	MADD[17]/MDT[11]	
18	MADD[16]/MDT[10]	Not use
17	MADD[15]/MDT[9]	
16	MADD[14]/MDT[8]	
15	GND	
14	MADD[13]/MDT[7]	
13	MADD[12]/MDT[6]	
12	MADD[11]/MDT[5]	
11	MADD[10]/MDT[4]	
10	MADD[9]/MDT[3]	
9	MADD[8]/MDT[2]	
8	MADD[7]/MDT[1]	
7	MADD[6]/MDT[0]	
6	DTACK[L]/WAIT[L]	
5	MEDUSA_INT[L]	
4	OE[L]/LDS[L]	
3	UWE[L]/UDS[L]	
2	RD/WR[L]	
1	GND	

MADD[5]
MADD[4]
MADD[3]
MADD[2]
MADD[1]
MADD[21] /MDT[15]
MADD[20] /MDT[14]
MADD[19] /MDT[13]
MADD[18] /MDT[12]
MADD[17] /MDT[11]
MADD[16] /MDT[10]
MADD[15] /MDT[9]
MADD[14] /MDT[8]
MADD[13] /MDT[7]
MADD[12] /MDT[6]
MADD[11] /MDT[5]
MADD[10] /MDT[4]
MADD[9] /MDT[3]
MADD[8] /MDT[2]
MADD[7] /MDT[1]
MADD[6] /MDT[0]

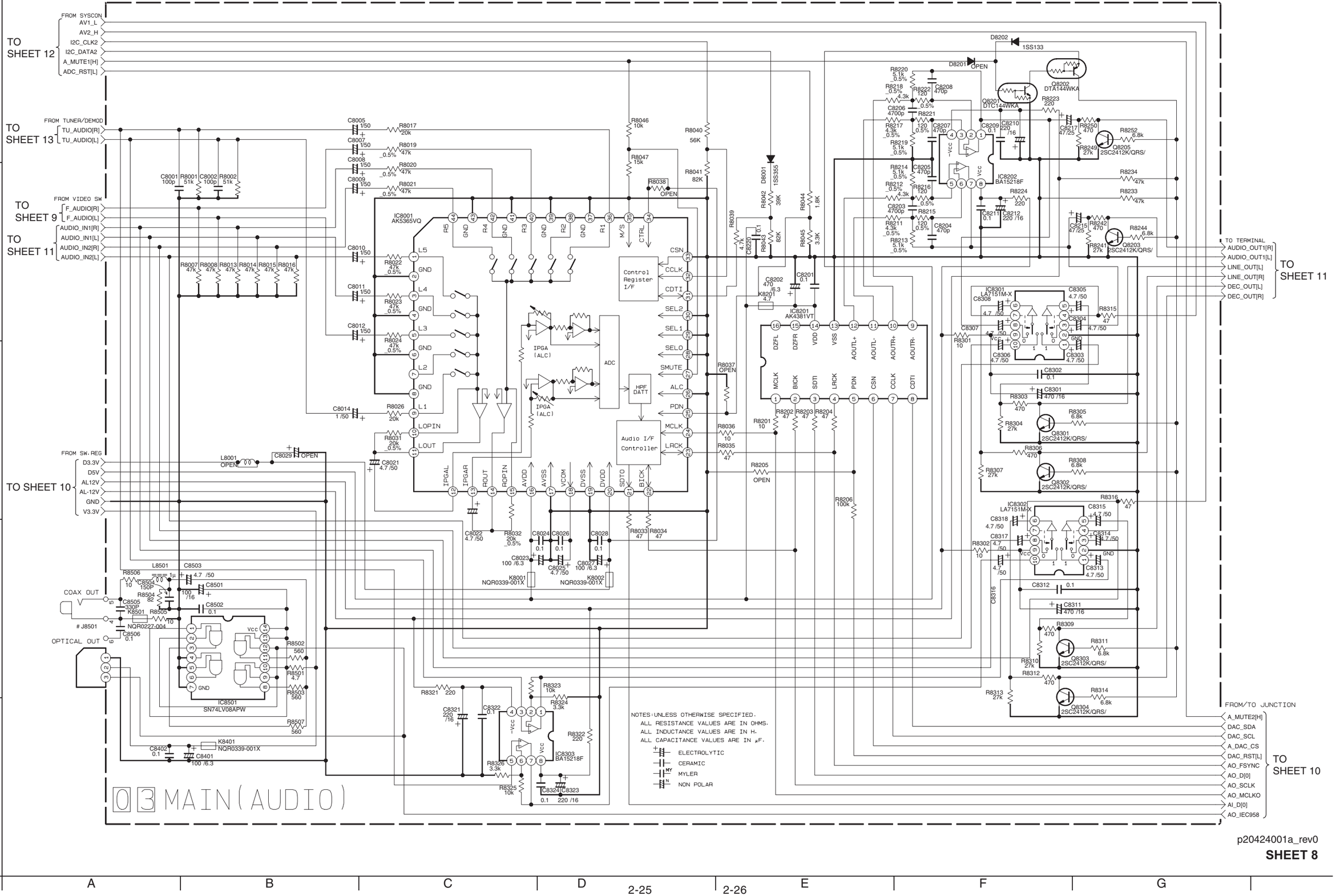
GND

02 DIGITAL (FLASH_MEMORY)

p20417001a_rev0

SHEET 7

■ Audio signal control section



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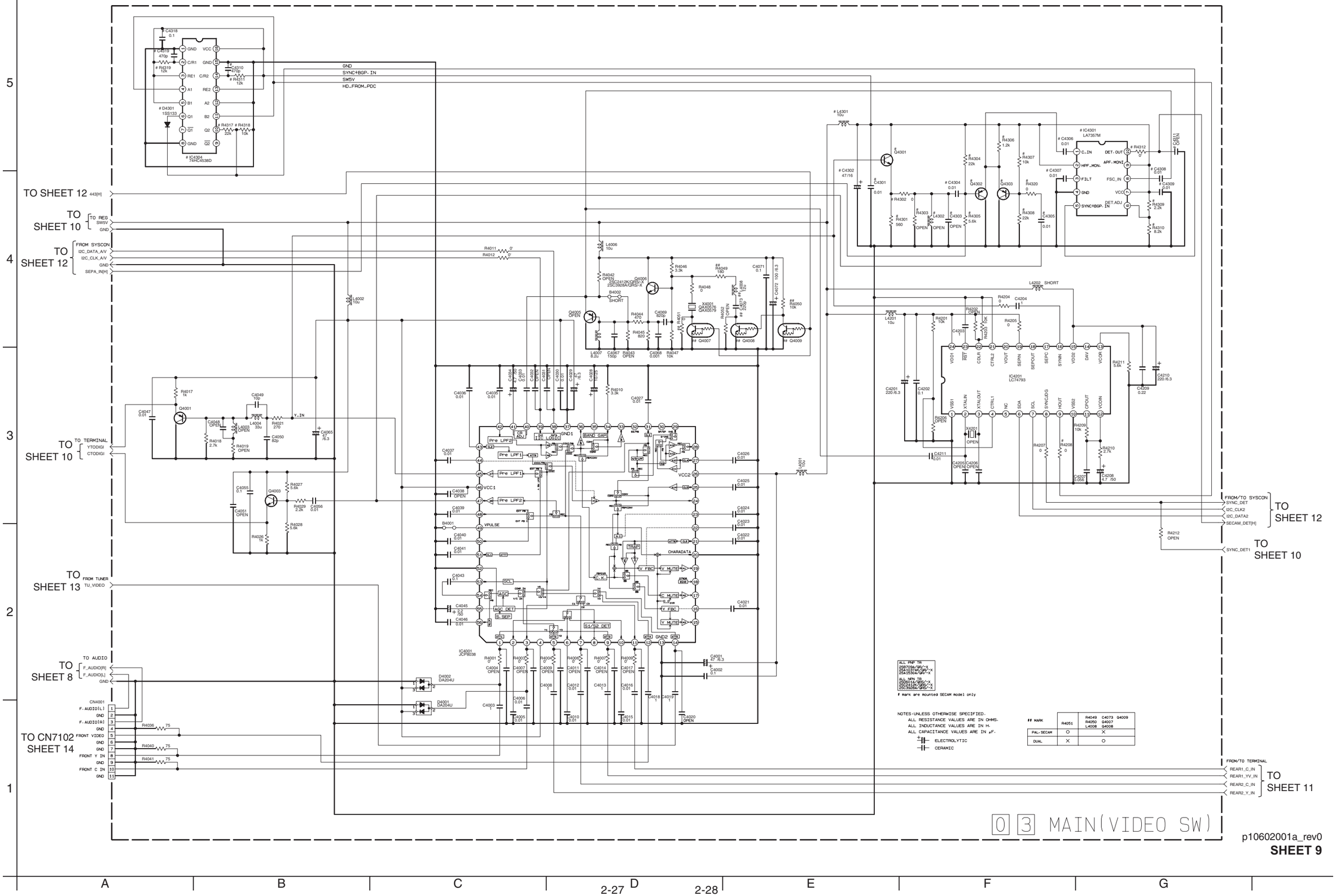
SHEET 8

■ Audio/Video signal input control section



■ Input/Output relay section

TO CN1001 SHEET 5

TO CN1002 SHEET 5

FROM/TO AUDIO
AO_D[0]
DAC_SCL
AO_SCLK
DAC_SDA
AO_MCLKO
A_DAC_CS
DAC_RST[L]
AO_FSYNC
AO_IEC958
AI_D[0]
A_MUTE2[H]
GND

TO SHEET 8

TO SHEET 9: CTODIGI, YTODIGI

TO SHEET 11: CBOUT, 480I[H], COUT, CROUT, RCOUT, YVOUT, RYOUT

TO TERMINAL RF5V

CN4101: FROM/TO AUDIO, AO_D[0], DAC_SCL, AO_SCLK, DAC_SDA, AO_MCLK, A_DAC_CS, GND, DAC_RST[L], CIN, AO_FSYNC, VYIN, GND, GND, GND, CBOUT, 480I[H], GND, COUT, CROUT, RCOUT, GND, GND, YVOUT, DAC_Y_OUT, GND, DAC_PB_OUT, RYOUT, DAC_PA_OUT

CN4102: D3.3V, D3.3V, D2.5V, D2.5V, D1.8V, D1.8V, D1.8V, GND, AO_IEC958, GND, GND, V3.3V, GND, D5V, K_BUS_OUT, GND, K_BUS_IN, SW5V, PMUTE[H], SYNCDET, P_CTL[H], SYS_RESET[L], AI_D[0], K_BUS_REQ, A_MUTE2[H], K_BUS_CLK, VD

FROM/TO SYSCON
VD
K_BUS_CLK
K_BUS_REQ
SYS_RESET[L]
P_CTL[H]

TO SHEET 12

B4101 SHORT

SYNC_DET1 — TO SHEET 9

P.MUTE[H]
K_BUS_IN
K_BUS_OUT
SAT_CTL
R.PAUSE
GND

TO SHEET 12

R4147 OPEN

C4084 0.1

OPEN: C4080, C4079, C4078, C4085, C4083, C4082

1000p

B4102

FROM SW.REG
AL5.3V

QNS0089-001
J4109
AV COMPU LINK
SAT CONTROL

2SC3576-JVC
2SD2144S
Q4101

R4104 220

R4105 OPEN

C4110 100/16

C4109 47/25

0 3 MAIN(JUNCTION)

TO VIDEO SW
SW5V
GND
TO SHEET 9

TO TERMINAL
GND
AL-12V
SW12V
SW5V
TO SHEET 11

TO AUDIO
D3.3V
GND
AL-12V
AL12V
D5V
V3.3V
TO SHEET 8

TO FRONT
DC3.9[+]
Dc3.9[-]
-29V
TO SHEET 14

TO SYSCON
FAN_CTL
P.CTL[H]
SW12V
SW5V
AL5.3V
P.SAVE
HDD_P.SAVE
GND
48V
TO SHEET 12

TO TUNER
BT2
TO SHEET 13

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MY MYLER
PP NON POLAR

CN4104: GND, GND, TPB-, TPB+, GND, TPA-, TPA+, GND, GND, GND

SHORT K4105
SHORT K4106
K4107

B4121 SHORT
KA4101 OPEN
B4123 SHORT
B4122 SHORT
KA4102 OPEN
B4124 SHORT

1394
J4112

TO CN1801 SHEET 2

36 JACK PWB

CN5102: D1.8V, D1.8V, D1.8V, D2.5V, GND, D3.3V, GND, GND, GND
Not use

CN5101: DC3.9[+], DC3.9[-], -29V, AL-12V, FAN_CTL, AL12V, P.CTL[H], SW12V, D5V, SW5V, SW5V, AL5.3V, P.SAVE, HDD_P.SAVE, GND, GND, V3.3V, BT2, 48V, GND, GND, GND

TO CN5301 SHEET 1

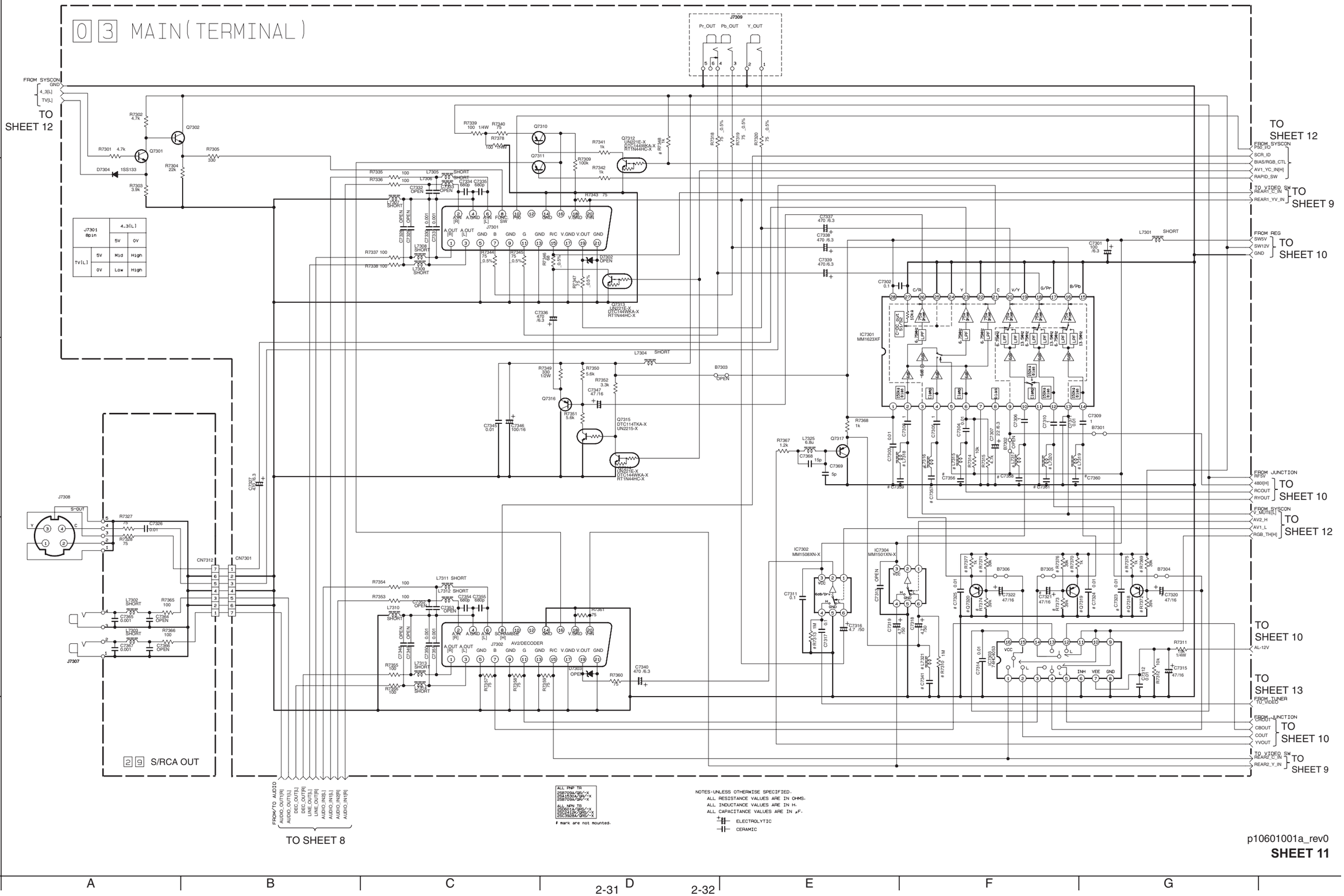
99 MAIN SUB

Connect to CN4101-1pin — K0110 — Connect to W1011(IC8001 side)
Connect to CN4101-3pin — K0120 — Connect to W619(IC8001 side)
Connect to CN4101-5pin — K0130 — Connect to W815(IC8001 side)

p20408001a_rev1

SHEET 10

■ Input/Output terminal section



p10601001a_rev0

SHEET 11

■ System controller section

03 MAIN(SYSCON)

FROM/TO VIDEO SW
TO SHEET 9 443[H]
TO SHEET 11 SCR_ID
SEPA_IN[H]
TO SHEET 9 SECAM_DET[H]
4_3[L]
TV[L]
TO SHEET 11 RGB_TH[H]
AV1_YC_IN[H]
BIAS/RGB_CTL
AV1_L
AV2_H
TO SHEET 10 P.MUTE[H]
RAPID_SW
TO SHEET 11 V_MUTE[L]
GND
TO SHEET 9 I2C_DATA_A/V
I2C_CLK_A/V

FROM/TO AUDIO
AV1_L
AV2_H
ADC_RST[L]
A_MUTE1[H]
I2C_DATA2
I2C_CLK2
TO SHEET 8

FROM/TO VIDEO SW
SYNC_DET
I2C_DATA2
I2C_CLK2
TO SHEET 9

FROM/TO SW. REG
HDD_P.SAVE
P.SAVE
SW5V
SW12V
48V
GND
FAN_CTL
P_CTL[H]
ALS.5V
TO SHEET 10

FROM/TO JUNCTION
K_BUS_OUT
K_BUS_IN
K_BUS_CLK
K_BUS_REQ
SYS_RESET[L]
GND
P_CTL[H]
VD
TO SHEET 10

FROM/TO DISPLAY/SW
VIDEO_LED
DVD_LED
DVD_REC_LED
HDD_LED
HDD_REC_LED
LED_OUT
BACK_UP_GND
AL5V
S_CLK
TOSYS
S_DATA_TOSYS
FRSYS
S_DATA_FRSYS
STB
RC_IN
GND
TO SHEET 14

IC3001 HD64F2194F***

TO TERMINAL
P50_I/O TO SHEET 11

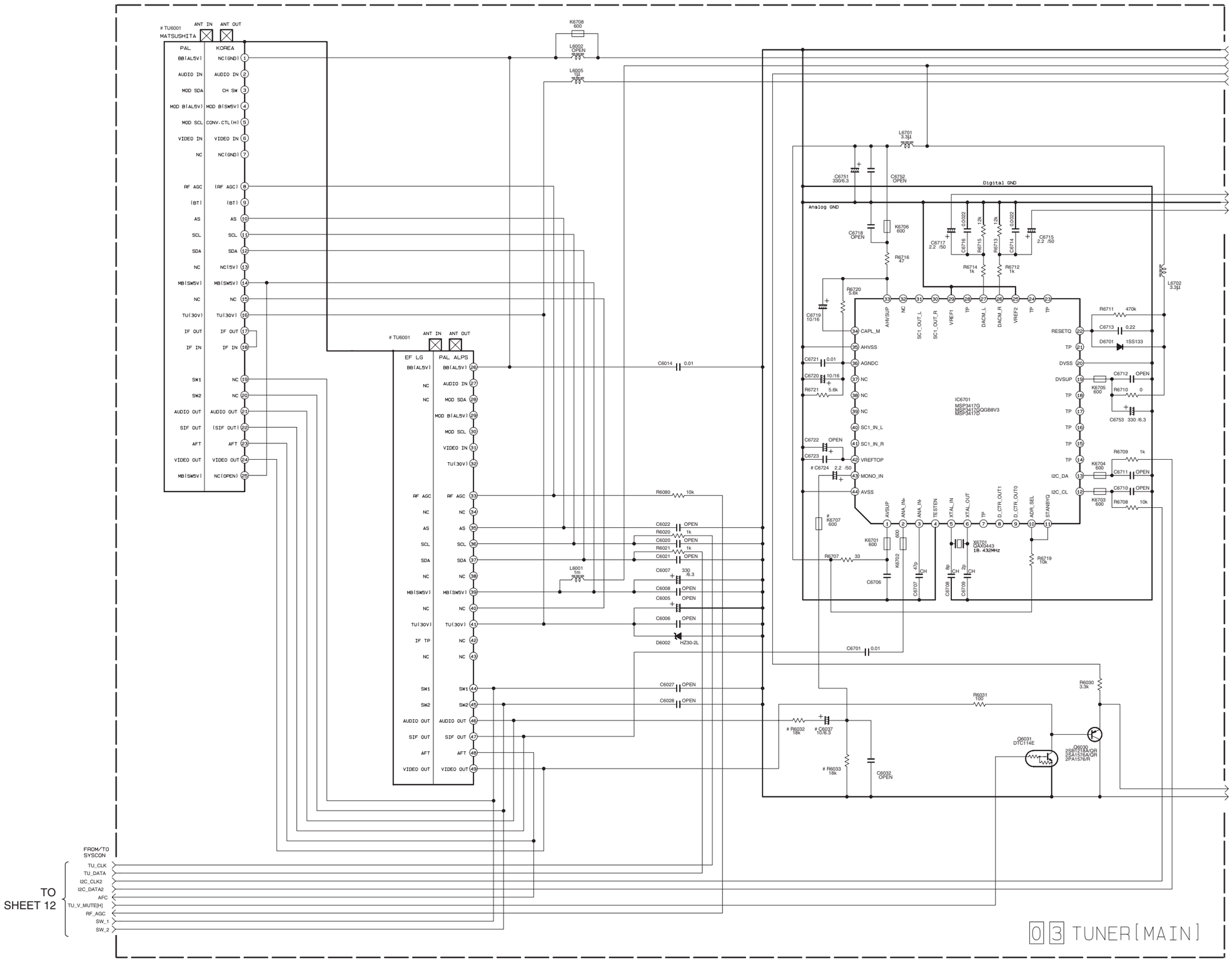
FROM/TO JUNCTION
R.PAUSE
SAT_CTL
GND
TO SHEET 10

FROM/TO BS/TU/DEMOD
I2C_DATA2
I2C_CLK2
TU_V_MUTE[H]
TU_DATA
TU_CLK
SW_2
SW_1
AFC
RF_AGC
TO SHEET 13

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

p10603001a_rev0
SHEET 12

■ Tuner section



■ FL Display and operation switch section

28 SW/DISPLAY

S7001 OPERATION
1SS133 1SS270A D7001
C7001 0.1
C7008 220 /6.3
IC7002 GP1UM281XK PNA4652M00XB
V.OUT
VCC
GND
[38kHz]
C7006 47 /6.3
R7016 0

IC7001
UPD16315GB-3BS
PT6315

S9 S8 S7 S6 S5 S4 S3 S2 S1 VDD VSS
S10 S11 S12 S13 S14 S15 S16 VEE S17 S18 G10
G9 G8 G7 G6 G5 G4 G3 G2 G1 VDD VSS
KEY2 KEY1 STB CLK DIN DOUT OSC LED4 LED3 LED2 LED1

R7002 10k
R7001 10k
R7009 10k
R7015 1k
R7005 4.7k
R7007 1k
R7006 4.7k
R7013 33k
R7014 33k
D7034 OPEN
D7033 OPEN
D7032 OPEN
D7035 OPEN
R7003 82k
C7005 OPEN
C7004 OPEN
D7031 OPEN
R7021 FR SHORT
L7001 0.0 SHORT
C7002 0.1
C7007 OPEN

LIGHTING
D7043 SDPB3DC0
2SC1740S/QRS/ 2SC3199/YG/ KTC3199/YG/ Q7001
R7044 1/4W 3.9K
D7042 1SS133 1SS270A
R7045 27 1/4W
C7056 10 /25
R7047 1.8K 1/4W
C7010 0.047
C7011 0.047
C7003 10 /50
R7010 10k
C7012 OPEN
RD9.1ES(B2)
D7021

F+ P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 12G 11G 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G F-

DI7001
QLF0121-001
QLF0124-001

FRONT_S_IN
J7001
R7152 75
R7151 75
C7150 0.01
J7002
FRONT_V IN
R7153 75
FRONT_A IN[L]
FRONT_A IN[R]
C7151 100p
C7152 OPEN
R7156 0
R7154 100
C7153 100p
C7154 OPEN
R7155 100
D7127

CN7102
1 GND
2 FRONT C IN
3 GND
4 FRONT Y IN
5 GND
6 GND
7 FRONT VIDEO
8 GND
9 F_AUDIO[R]
10 GND
11 F_AUDIO[L]

TO CN4001 SHEET 9

27 OPERATE

SLR-343VC
R7115 OPEN
R7114 330 1/4W
D7107 DTA114ESA
D7126 HDD SLR343BBT3F
B7107 OPEN
R7113 OPEN
R7112 330 1/4W
D7108 DTA114ESA
D7125
B7106 OPEN
SLR-343VC
R7111 OPEN
R7110 330 1/4W
D7105 DTA114ESA
D7124 DVD SLR-343VC
B7105 OPEN
R7109 OPEN
R7108 330 1/4W
D7104 DTA114ESA
D7123 VIDEO SLR-343MC
B7104 OPEN
R7107 OPEN
R7106 330 1/4W
D7102 DTA114ESA
B7103 OPEN
B7108

D7112 1SS133 1SS270A S7132 EJECT
D7113 1SS133 1SS270A # S7133 # S7113
D7114 1SS133 1SS270A # S7134 # S7114
D7115 1SS133 1SS270A # S7135 # S7115

CN7101 1 2 3 4 5 6 7 8 9 10 11 12 13
CN3002 13 12 11 10 9 8 7 6 5 4 3 2 1

03 MAIN

CN7001
1 S12
2 S13
3 S14
4 S15
5 KEY2
6 KEY1
7 BLUE LED
8 STB
9 S_DATA_FRSYS
10 S_DATA_TOSYS
11 S_CLK
12 RC_IN
13 AL5V
14 GND
15 BACK UP GND
16 DC3.5[-]
17 -29V
18 DC3.5[+]

CN3001
18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

B3975 # B3976

HDD_REC_LED
HDD_LED
DVD_REC_LED
DVD_LED
VIDEO_LED
LED_OUT
STB
S_DATA_FRSYS
S_DATA_TOSYS
S_CLK
RC_IN
AL5V
GND
BACK_UP_GND

TO SHEET 12

DC3.5[-]
-29V
DC3.5[+]

TO SHEET 10

DIFFERENCE TABLE

	S7113	S7114	S7115	S7133	S7134	S7135	D7123, R7106 Q7103, B7108 B3976	D7124-D7127, R7108 R7110, R7112, R7114 Q7104-Q7107, B3975	CN7101	CN3002
M10	REC	REC MODE	PAUSE	×	STOP	PLAY	×	×	9PIN(5-13)	9PIN(1-9)
MH20/MH30	DVD	HDD	REC	STOP	PLAY	PAUSE	×	○	13PIN	13PIN

NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC
MY MYLER
N NON POLAR

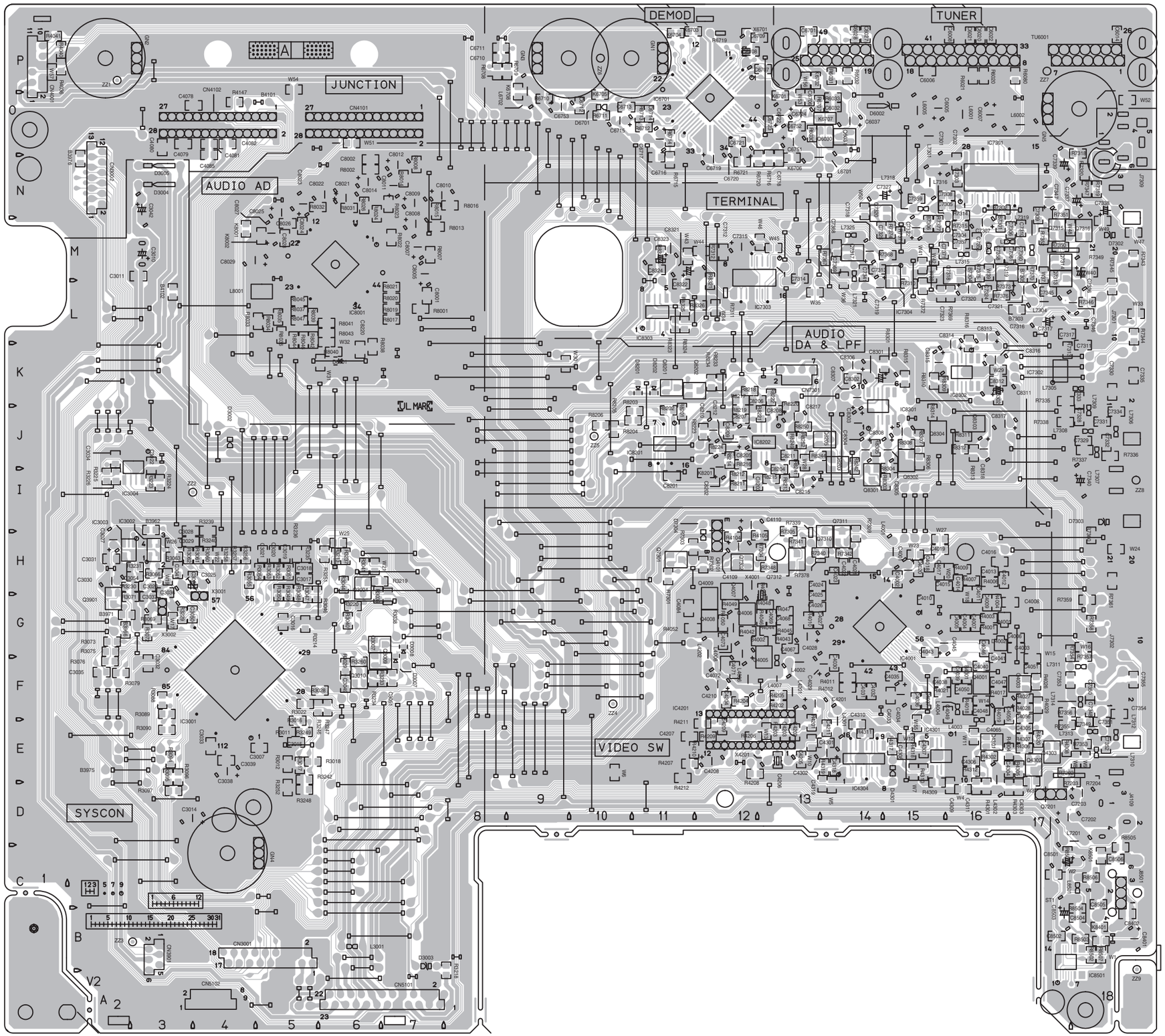
	LAST No.		VACANT No.	
R	7047	7156	7004, 7008, 7011, 7012, 7017-7020, 7022-7043, 7046	7101-7105, 7116-7150
C	7056	7154	7009, 7013-7055	7101-7149
D	7043	7127	7002-7020, 7022-7030, 7036-7041	7101-7111, 7116-7122
Q	7001	7107		7101, 7102
L	7001			
IC	7002			
DI	7001			
S	7001	7135		7101-7112, 7116-7131
CN	7001	7102		

p20404001a_rev0

SHEET 14

Printed circuit boards

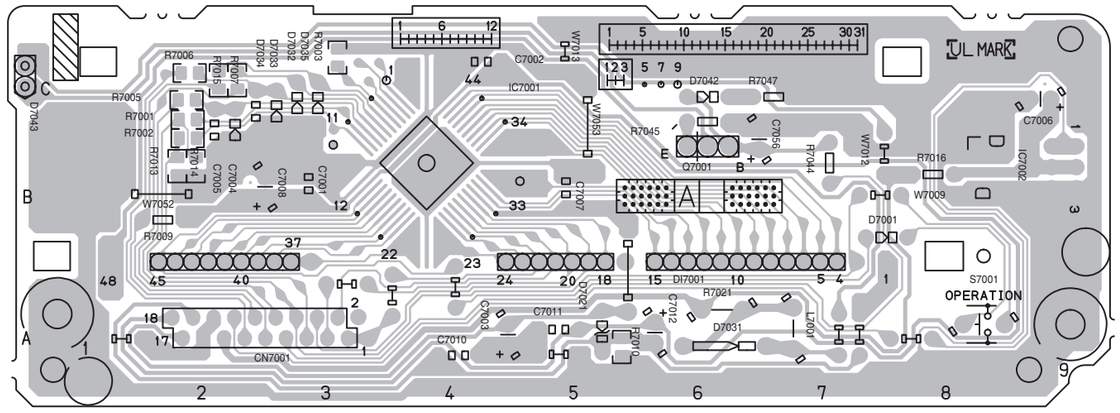
■ Main board <03> LPB10239-001C



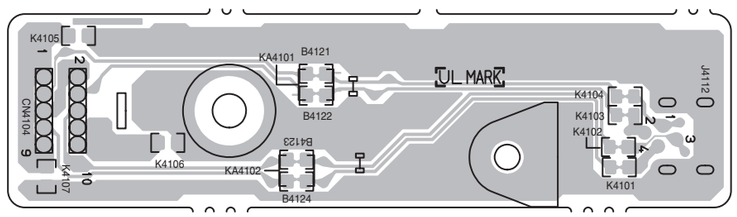
COMPONENT PARTS LOCATION GUIDE <MAIN> LPB10239-001C

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		C4304	B C 17E	C8014	A D 6N	L4201	A D 13F	R3094	B C 3E	R7007	B C 10C	R8242	B C 14J
C3007	B C 5E	C4305	B C 17E	C8021	A D 6N	L4202	A D 12G	R3095	B C 3E	R7014	B C 10B	R8244	B C 13J
C3010	A D 3M	C4306	B C 16E	C8022	A D 6N	L4301	A D 14F	R3096	B C 3E	R7015	B C 10C	R8249	B C 13J
C3011	B C 3M	C4307	B C 15E	C8023	A D 5N	L4302	A D 16D	R3097	B C 3D	R7202	B C 17E	R8250	B C 13J
C3014	A D 4D	C4308	B C 15E	C8024	B C 5M	L6001	A D 16O	R3213	B C 6H	R7203	B C 18E	R8252	B C 13J
C3015	B C 5E	C4309	B C 16D	C8025	A D 5N	L6002	A D 17O	R3214	B C 5G	R7204	A D 18E	R8301	B C 15K
C3016	B C 5G	C4310	B C 14E	C8026	B C 5M	L6005	A D 15O	R3218	B C 8B	R7301	B C 11H	R8302	B C 16K
C3017	B C 5H	C4311	B C 16D	C8027	A D 5M	L6701	A D 13N	R3219	B C 6H	R7302	B C 12H	R8303	B C 15I
C3018	B C 5H	C4318	B C 14E	C8028	B C 5M	L6702	A D 9P	R3220	B C 6G	R7303	B C 11H	R8304	B C 15J
C3019	B C 5H	C4319	B C 14D	C8029	A D 5M	L7201	A D 18D	R3223	B C 3I	R7304	B C 13H	R8305	B C 14J
C3020	B C 5H	C6005	A D 15O	C8201	B C 11I	L7301	A D 15N	R3224	B C 3I	R7305	B C 13I	R8306	B C 15J
C3021	B C 5H	C6006	B C 15P	C8202	A D 12I	L7302	A D 19C	R3225	B C 2I	R7309	B C 14H	R8307	B C 15J
C3022	B C 3J	C6007	A D 16O	C8203	B C 13I	L7304	A D 17L	R3226	B C 2I	R7310	B C 15L	R8308	B C 15J
C3024	B C 4H	C6008	B C 16P	C8204	B C 13I	L7305	A D 17K	R3229	B C 3G	R7311	A D 12L	R8309	B C 15K
C3025	A D 4H	C6014	B C 18P	C8205	B C 12J	L7306	A D 18J	R3230	B C 3H	R7312	B C 12M	R8310	B C 15K
C3026	B C 3H	C6020	B C 16P	C8206	B C 13K	L7307	A D 18J	R3231	B C 3H	R7313	B C 17K	R8311	B C 16J
C3027	A D 2H	C6021	B C 16P	C8207	B C 12J	L7308	A D 18J	R3233	B C 7F	R7314	B C 16N	R8312	B C 16J
C3028	B C 3I	C6022	B C 16P	C8208	B C 13J	L7309	A D 18J	R3234	B C 6F	R7315	B C 16M	R8313	B C 16J
C3029	B C 3H	C6027	B C 14P	C8209	B C 12J	L7310	A D 18E	R3235	B C 5H	R7318	B C 18O	R8314	B C 15J
C3030	A D 2H	C6028	B C 14P	C8210	A D 12J	L7311	A D 17F	R3236	B C 5H	R7319	B C 18N	R8315	B C 15K
C3031	B C 2H	C6032	B C 14O	C8211	B C 13J	L7312	A D 18E	R3237	B C 6H	R7320	B C 18N	R8316	B C 16K
C3032	B C 3F	C6037	A D 14O	C8212	A D 12J	L7313	A D 18E	R3239	B C 4I	R7335	B C 17K	R8321	B C 12L
C3033	B C 4E	C6701	B C 13P	C8215	A D 13I	L7314	A D 18F	R3240	B C 4H	R7336	B C 18J	R8322	B C 11M
C3034	B C 2J	C6706	B C 13O	C8217	A D 13J	L7315	A D 16M	R3242	B C 5E	R7337	B C 18J	R8323	B C 11L
C3035	B C 2F	C6707	B C 13P	C8220	B C 6K	L7316	A D 16M	R3246	B C 6F	R7338	B C 17J	R8324	B C 11L
C3036	B C 3H	C6708	B C 12P	C8301	A D 15K	L7317	A D 16M	R3247	B C 6F	R7339	A D 13I	R8325	B C 11L
C3037	B C 3G	C6709	B C 13P	C8302	B C 14K	L7318	A D 15N	R3248	B C 5D	R7340	B C 14H	R8326	B C 12L
C3038	A D 4E	C6710	B C 8P	C8303	A D 14J	L7319	A D 17M	R3249	B C 5E	R7341	B C 13H	R8501	B C 17C
C3039	B C 4E	C6711	B C 8P	C8304	A D 14J	L7320	A D 16M	R3251	B C 6H	R7342	B C 14H	R8502	B C 18B
C3041	B C 3H	C6712	B C 10O	C8305	A D 15J	L7321	A D 14L	R3252	B C 5D	R7343	B C 19M	R8503	B C 18B
C3042	A D 3N	C6713	B C 10O	C8306	A D 14K	L7325	A D 14M	R3256	B C 4H	R7344	B C 19L	R8504	B C 18B
C3049	B C 6F	C6714	B C 11O	C8307	A D 14K	L8001	B C 5L	R3257	B C 4H	R7345	B C 18L	R8505	B C 18C
C3050	B C 3G	C6715	A D 10O	C8308	A D 15J	L8501	A D 18C	R3258	B C 4H	R7346	B C 18L	R8506	B C 18C
C3051	B C 7F	C6716	B C 11N	C8311	A D 16K			R3260	B C 6F	R7347	B C 18N	R8507	B C 18B
C3054	B C 3H	C6717	A D 11O	C8312	B C 16K	**TRANSISTOR**		R4001	B C 16G	R7348	B C 13H		
C4001	A D 15H	C6718	B C 13N	C8313	A D 16L	Q3004	B C 6H	R4003	B C 16G	R7349	A D 17M	**OTHER**	
C4002	B C 15H	C6719	A D 12N	C8314	A D 16K	Q3007	B C 6G	R4004	B C 16G	R7350	B C 17M	GN1	A D 10P
C4003	B C 17G	C6720	A D 12O	C8315	A D 15K	Q3009	B C 6F	R4006	B C 16H	R7351	B C 17N	GN2	A D 2P
C4004	B C 16G	C6721	B C 12O	C8316	A D 16K	Q3010	B C 6F	R4007	B C 16H	R7352	B C 17M	GN3	A D 9P
C4005	B C 16G	C6722	A D 13O	C8317	A D 17J	Q3901	B C 2G	R4009	B C 16H	R7353	B C 18E	GN4	A D 4C
C4006	B C 17G	C6723	B C 13O	C8318	A D 16J	Q4001	B C 16F	R4010	B C 13G	R7354	B C 17G	GN5	A D 18O
C4007	B C 16G	C6724	A D 13O	C8321	A D 11M	Q4003	B C 17F	R4011	B C 14F	R7355	B C 17E	J4109	A D 19D
C4008	B C 17G	C6751	A D 13O	C8322	B C 11L	Q4005	B C 13F	R4012	B C 14F	R7356	B C 17F	J7301	A D 18L
C4009	B C 16G	C6752	B C 13O	C8323	A D 11M	Q4006	B C 12G	R4017	B C 16F	R7357	B C 18G	J7309	A D 19O
C4010	B C 15G	C6753	A D 9O	C8324	B C 11M	Q4007	B C 12H	R4018	B C 16F	R7358	B C 18G	J8501	A D 19C
C4011	B C 16G	C7202	A D 17D	C8401	A D 19B	Q4008	B C 12G	R4019	B C 16F	R7359	B C 18G	K6701	B C 13O
C4012	B C 16H	C7203	A D 18D	C8402	B C 18B	Q4009	B C 12G	R4021	B C 15F	R7360	B C 18H	K6702	B C 13P
C4013	B C 16H	C7301	A D 15N	C8501	A D 18C	Q4101	A D 12I	R4026	B C 17F	R7361	B C 18H	K6703	B C 11P
C4014	B C 16H	C7302	B C 16N	C8502	B C 17B	Q4301	B C 16E	R4027	B C 17F	R7367	B C 14M	K6704	B C 11P
C4015	B C 15H	C7303	B C 16N	C8503	A D 17C	Q4302	B C 17E	R4028	B C 17F	R7368	B C 15M	K6705	B C 10O
C4016	B C 16H	C7304	B C 16M	C8504	B C 18B	Q4303	B C 17E	R4029	B C 17F	R7369	B C 16L	K6706	B C 13N
C4017	B C 15H	C7305	B C 16N	C8505	B C 18C	Q6030	B C 14O	R4036	B C 1P	R7370	B C 17M	K6707	B C 14O
C4018	B C 15H	C7306	B C 17M	C8506	B C 18C	Q6031	B C 14O	R4040	B C 1P	R7371	B C 15M	K6708	B C 9P
C4019	B C 15H	C7307	A D 16M			Q7001	A D 14C	R4041	B C 1P	R7372	B C 15L	K8001	B C 4M
C4020	B C 15H	C7308	B C 16N	**CONNECTOR**		Q7201	A D 17D	R4042	B C 12G	R7373	B C 16L	K8002	B C 5M
C4021	B C 14H	C7309	B C 17N	CN3001	A D 5B	Q7301	B C 11H	R4043	B C 13G	R7374	B C 15M	K8201	B C 12I
C4022	B C 14H	C7310	B C 17M	CN3002	A D 2N	Q7302	B C 12H	R4044	B C 13G	R7375	B C 16M	K8401	B C 18B
C4023	B C 14H	C7311	B C 18K	CN3901	A D 3B	Q7310	B C 14H	R4045	B C 13G	R7376	B C 16L	K8501	B C 18C
C4024	B C 13H	C7312	B C 12M	CN4001	A D 1O	Q7311	B C 14H	R4046	B C 13G	R7377	B C 15M	PC0954	B C 22Q
C4025	B C 13G	C7313	B C 14M	CN4101	A D 7O	Q7312	B C 13H	R4047	B C 13G	R7378	A D 14H	PC0958	B C 1A
C4026	B C 13G	C7314	B C 13M	CN4102	A D 5O	Q7313	B C 17M	R4048	B C 13G	R8001	B C 7L	TP3901	B C 6G
C4027	B C 13G	C7315	A D 12M	CN5101	A D 7A	Q7314	B C 17M	R4049	B C 12G	R8002	B C 6N	TP3902	B C 5G
C4028	A D 13G	C7316	A D 17L	CN5102	A D 3A	Q7315	B C 17M	R4050	B C 12G	R8007	B C 7M	TP3903	B C 3I
C4029	A D 14F	C7317	B C 17L	CN7301	A D 13K	Q7316	B C 18M	R4051	B C 13H	R8008	B C 7N	TP3904	B C 3G
C4030	B C 14F	C7318	A D 14M			Q7317	B C 14M	R4052	B C 11G	R8013	B C 7M	TP3905	B C 3H
C4031	B C 14F	C7319	A D 14L	**DIODE**		Q7318	B C 16M	R4104	B C 12H	R8014	B C 7N	TP3906	B C 4H
C4032	B C 14F	C7320	A D 16L	D3002	A D 4J	Q7319	B C 16M	R4105	B C 13H	R8015	B C 7N	TP3907	B C 4H
C4033	B C 15F	C7321	A D 17L	D3003	A D 7B	Q7320	B C 14N	R4147	B C 4O	R8016	B C 8N	TP3908	B C 4H
C4034	A D 15F	C7322	A D 15M	D3004	A D 3N	Q8201	B C 11K	R4201	B C 13E	R8017	B C 7L	TU6001	A D 19P
C4035	B C 15F	C7323	B C 15L	D3005	A D 3N	Q8202	B C 12K	R4202	B C 13F	R8019	B C 7L	X3001	A D 4G
C4036	B C 15F	C7324	B C 16L	D3007	B C 7F	Q8203	B C 14J	R4203	B C 13E	R8020	B C 7L	X3002	A D 3G
C4037	B C 15F	C7325	B C 14M	D3008	B C 7G	Q8205	B C 14J	R4204	B C 12F	R8021	B C 7L	X4001	A D 13G
C4038	B C 15F	C7327	A D 15N	D4001	B C 16G	Q8301	B C 14I	R4205	B C 13F	R8022	B C 7M	X4201	A D 13E
C4039	B C 16F	C7328	B C 18J	D4002	B C 16G	Q8302	B C 15J	R4206	B C 12E	R8023	B C 7N	X6701	A D 12P
C4040	B C 16F	C7329	B C 18J	D4301	A D 15E	Q8303	B C 16J	R4207	B C 11E	R8024	B C 6N		
C4041	B C 16F	C7330	B C 18K	D6002	A D 14O	Q8304	B C 15J	R4208	B C 12E	R8026	B C 6N		
C4043	B C 15G	C7331	B C 18J	D6701	A D 10O			R4209	B C 12E	R8031	B C 6N		
C4045	A D 15G	C7332	B C 18J	D7021	A D 13A	**RESISTOR**		R4210	B C 11E	R8032	B C 5N		
C4046	B C 16G	C7333	B C 18K	D7302	A D 18M	R3011	B C 5E	R4211	B C 12E	R8033	B C 5L		
C4047	B C 16F	C7334	B C 18J	D7303	A D 18I	R3012	B C 5E	R4212	B C 11E	R8034	B C 5L		
C4048	B C 16F	C7335	B C 19K	D7304	A D 12H	R3016	B C 5E	R4301	B C 16D	R8035	B C 5L		
C4049	B C 16F	C7336	A D 18M	D8001	B C 6K	R3017	B C 5E	R4302	B C 16E	R8036	B C 5L		
C4050	B C 16F	C7337	A D 18N	D8201	B C 11K	R3018	B C 5E	R4303	B C 17D	R8037	B C 5L		
C4051	B C 17F	C7338	A D 18N	D8202	B C 11K	R3022	B C 5F	R4304	B C 17E	R8038	B C 6K		
C4055	B C 17F	C7339	A D 17N			R3028	B C 6F	R4305	B C 17E	R8039	B C 5L		
C4056	B C 17F	C7340	A D 18I	**IC**		R3029	B C 6F	R4306	B C 17E	R8040	B C 6K		
C4065	A D 17F	C7341	B C 14M	IC3001	B C 4F	R3038	B C 7G	R4307	B C 17E	R8041	B C 6L		
C4067	B C 13G	C7345	B C 17L	IC3002	B C 3H	R3039	B C 6G	R4308	B C 17E	R8042	B C 5L		
C4068	B C 13G	C7346	A D 18L	IC3003	B C 2H	R3040	B C 6G	R4309	B C 15D	R8043	B C 6L		
C4069	B C 13G	C7347	A D 17N	IC3004	B C 3J	R3041	B C 6H	R4310	B C 15E	R8044	B C 5L		
C4071	B C 12F	C7348	B C 18F	IC4001	B C 14G	R3044	B C 6H	R4311	B C 14E	R8045	B C 5L		
C4072	A D 12G	C7349	B C 18E	IC4201	A D 13E	R3046	B C 5G	R4312	B C 16E	R8046	B C 5L		
C4073	B C 12G	C7350	B C 18F	IC4301	B C 15E	R3047	B C 5G	R4317	B C 15E	R8047	B C 5L		
C4078	B C 4O	C7351	B C 18E	IC4304	B C 14E	R3048	B C 5H	R4318	B C 15E	R8201	B C 11J		
C4079	B C 3O	C7352	B C 18E	IC6701	B C 12O	R3049	B C 5H	R4319	B C 14E	R8202	B C 11J		
C4080	B C 3O	C7353	B C 17F	IC7301	B C 16N	R3050	B C 5H	R4320	B C 17E	R8203	B C 11J		
C4081	B C 4O	C7354	B C 18F	IC7302	B C 17K	R3051	B C 5H	R6020	B C 16P	R8204	B C 11J		
C4082	B C 4O	C7355	B C 19F	IC7303	B C 12M	R3052	B C 5H	R6021	B C 16P	R8205	B C 10J		
C4084	B C 11G	C7356	B C 16M	IC7304	B C 15M	R3053	B C 5H	R6030	B C 13O	R8206	B C 10J		
C4085	B C 4O	C7357	B C 16M	IC8001	B C 6M	R3054	B C 5H	R6031	B C 14P	R8211	B C 12I		
C4109	A D 12H	C7358	B C 16M	IC8201	B C 11J	R3055	B C 4H	R6032	B C 14P	R8212	B C 12I		
C4110	A D 12I	C7359	B C 15N	IC8202	B C 13J	R3060	B C 4H	R6033	B C 14O	R8213	B C 13I		
C4201	A D 13F	C7360	B C 17M	IC8301	B C 14J	R3061	B C 4H	R6080	B C 17P	R8214	B C 12J		
C4202	B C 13E	C7361	B C 17M	IC8302	B C 16K	R3062	B C 3H	R6707	B C 13O	R8215	B C 13I		
C4203	B C 13E	C7368	B C 14M	IC8303	B C 11L	R3063	B C 3H	R6708	B C 8P	R8216	B C 12J		
C4204	B C 12F	C7369	B C 14M	IC8501	B C 17B	R3066	B C 3H	R6709	B C 9P	R8217	B C 12K		
C4205	B C 13E	C7371	B C 15M			R3069	B C 3G	R6710	B C 9O	R8218	B C 12K		
C4206	B C 13E	C8001	B C 7L	**COIL**		R3071	B C 3G	R6711	B C 10O	R8219	B C 12J		
C4207	B C 11E	C8002	B C 6N	L3001	A D 6B	R3072	B C 3G	R6712	B C 11O	R8220	B C 13J		
C4208	A D 12E	C8005	A D 7M	L4001	A D 15H	R3073	B C 2G	R6713	B C 11O	R8221	B C 13J		
C4209	B C 12E	C8007	A D 7M	L4002	A D 13F	R3075	B C 2G	R6714	B C 11O	R8222	B C 13K		
C4210	A D 12F	C8008	A D 7M	L4003	A D 16E	R3076	B C 2F	R6715	B C 11N	R8223	B C 12J		
C4211	B C 14E	C8009	A D 7N	L4004	A D 16F	R3079	B C 2F	R6716	B C 13N	R8224	B C 12J		
C4301	B C 14E	C8010	A D 7N	L4006	A D 12F	R3088	B C 3F	R6719	A D 12P	R8233	B C 12K		
C4302	A D 14E	C8011	A D 7N	L4007	A D 13F	R3089	B C 3F	R6720	B C 13N	R8234	B C 12K		
C4303	B C 17D	C8012	A D 7N	L4008	A D 12G	R3090	B C 3E	R6721	B C 12N	R8241	B C 13I		

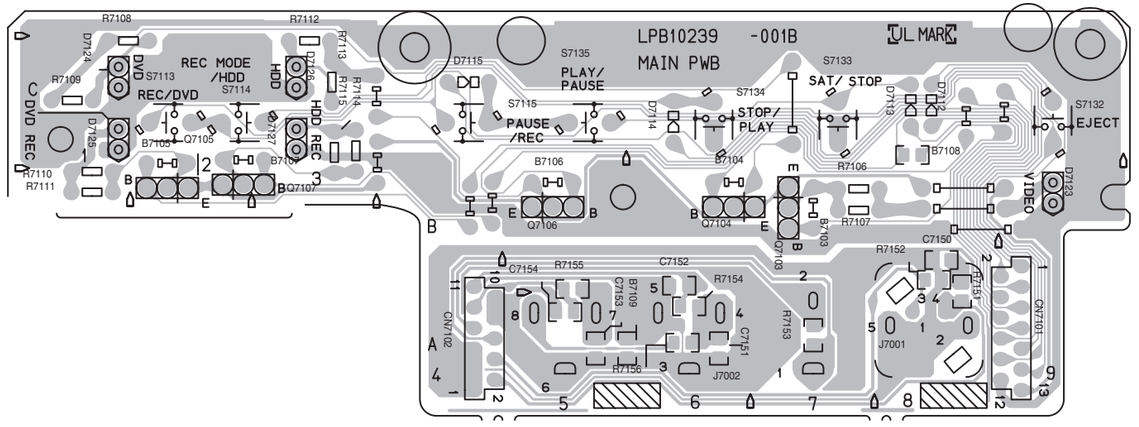
■ Switch display board <28> LPB10239-001C



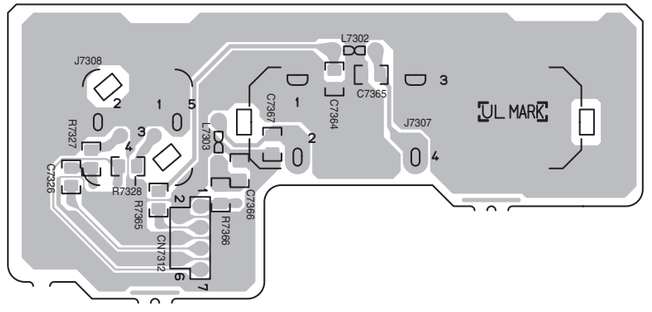
■ Jack board <36> LPB10239-001C



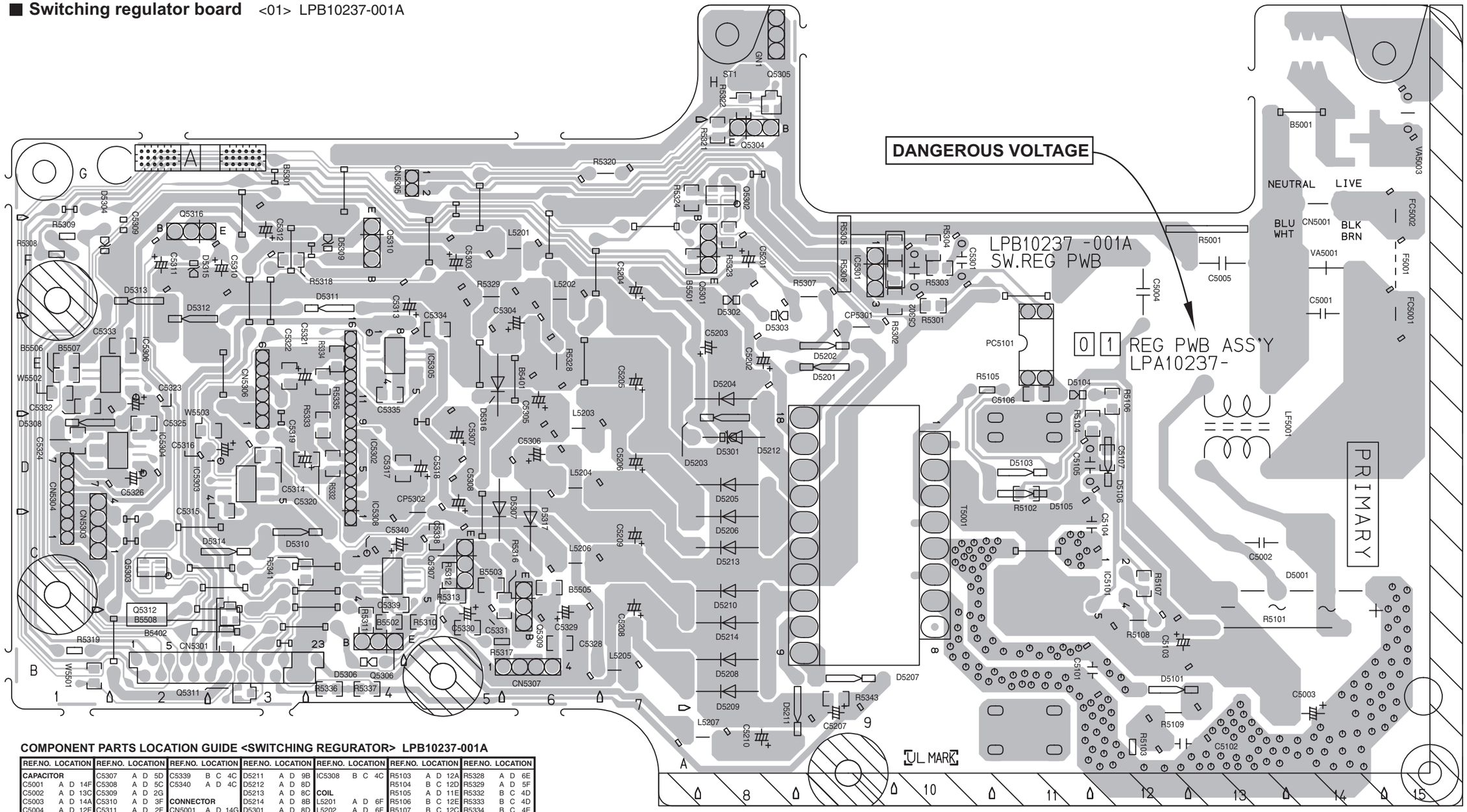
■ Operation board <27> LPB10239-001C



■ S/RCA Out board <29> LPB10239-001C



■ Switching regulator board <01> LPB10237-001A


DANGEROUS VOLTAGE
LPB10237 -001A
SW.REG PWB
0 1 REG PWB ASS'Y
LPA10237-
PRIMARY
NEUTRAL
LIVE
BLU WHT
BLK BRN
CN5001
B5001
VA5003
FC5002
F5001
FC5001
VA5001
C5001
C5004
C5005
R5001
LF5001
PC5101
R5105
C5106
D5104
R5106
R5104
C5105
C5107
D5106
D5103
R5102
D5105
T5001
C5104
IC5101
C5002
D5001
R5101
R5107
R5108
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C5101
D5101
C5003
R5109
R5103
C5102
UL MARK
D5207
R5343
C5207
D5211
L5207
C5210
R5317
CN5307
D5306
Q5306
R5336
R5337
Q5311
Q5312
B5508
B5402
R5319
W5501
CN5301
Q5303
R5341
D5310
D5314
Q5316
R5309
R5308
D5304
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C5311
D5315
C5310
C5312
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Q5310
R5318
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D5311
D5312
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B5507
W5502
C5332
D5308
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C5320
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CN5303
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C5317
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IC5308
CP5302
C5340
Q5307
R5312
R5313
C5339
R5311
B5502
R5310
C5330
C5331
C5329
C5328
B5503
B5505
R5316
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C5208
L5205
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C5209
D5317
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C5334
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L5204
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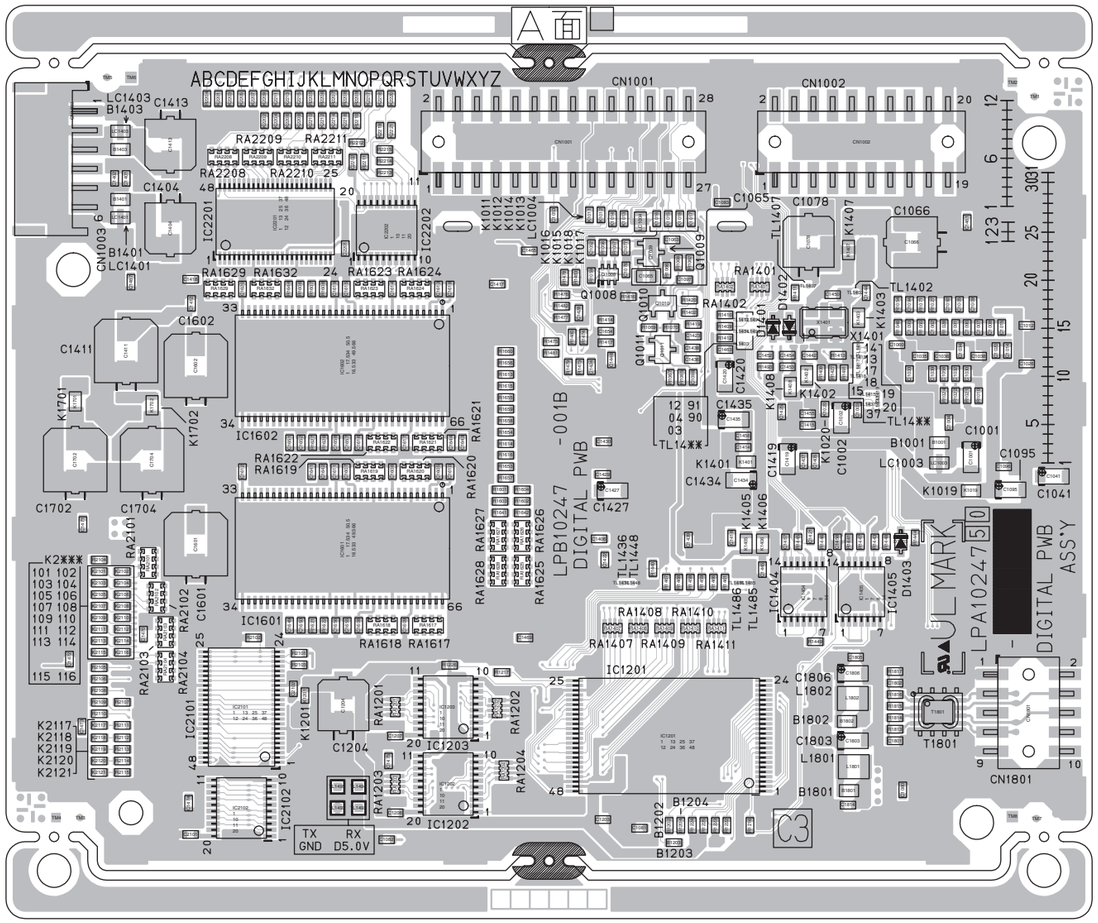
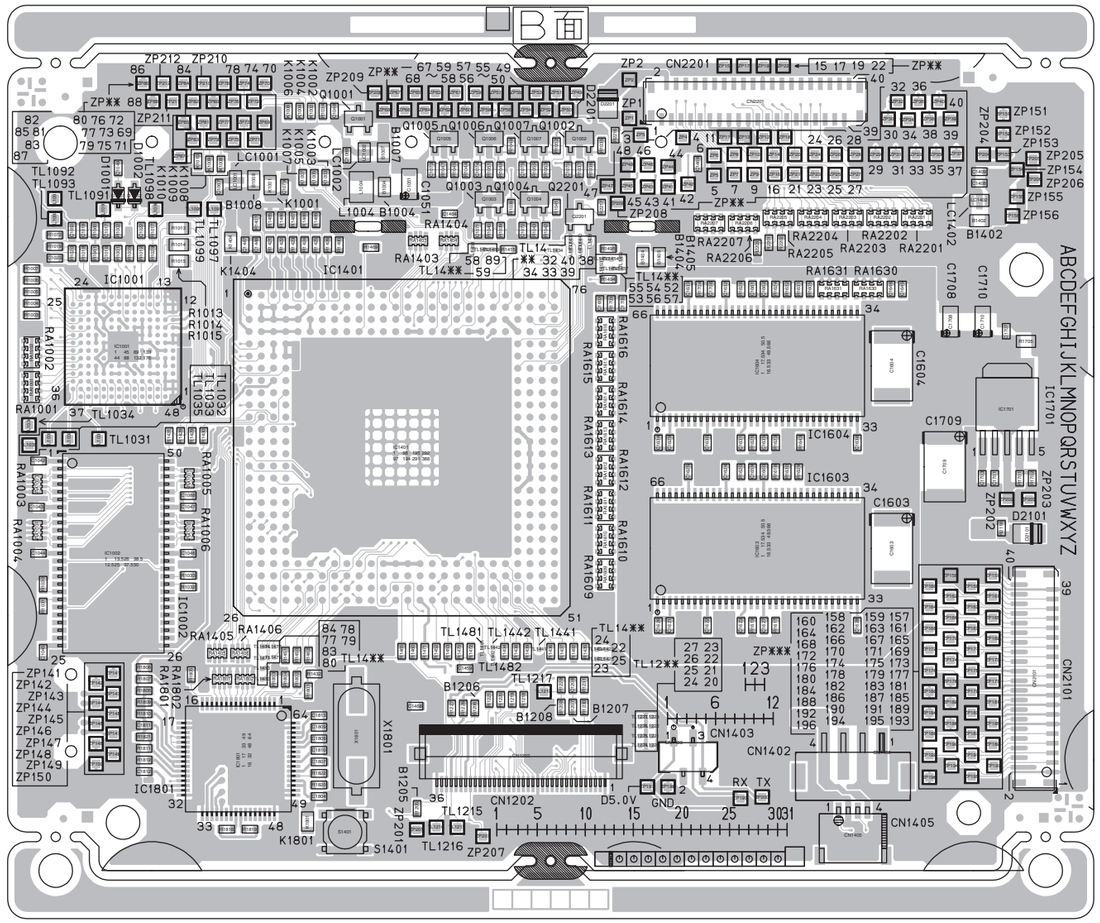
Q5338
Q5307
R5312
R5313

■ Digital board <02> LPB10247-001B

Forward side



Reverse side



COMPONENT PARTS LOCATION GUIDE <DIGITAL BOARD> LPB10247-001B

REF.NO.	LOCATION
CAPACITOR	
C1001	A C 1D
C1002	A C 2D
C1003	A C 2D
C1004	A C 1D
C1005	A C 1E
C1007	A C 1E
C1008	A C 1E
C1009	A C 1E
C1012	A C 1E
C1014	A C 1D
C1015	A C 1E
C1017	B C 1E
C1018	B C 1E
C1019	B C 1E
C1020	A C 1D
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C1442	A C 2D
C1444	A C 2E
C1445	A C 3C
C1446	A C 4D
C1447	B C 2E
C1448	B C 2E

REF.NO.	LOCATION
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C1463	A C 3D
C1464	B C 4E
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C1466	B C 5F
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C1469	A C 4B
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C1471	A C 8C
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C1473	A C 8B
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C2102	A C 6C
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C2202	A C 6C
CONNECTOR	
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CN1002	A C 2F
CN1003	A C 8F
CN1202	B C 4B
CN1402	B C 7B
CN1403	B C 5B

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CN2101	B C 8B
CN2201	B C 6F
DIODE	
D1001	B C 1F
D1002	B C 1F
D1401	A C 3E
D1402	A C 3E
D1403	A C 2C
D2101	B C 8C
D2201	B C 5F
IC	
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IC1002	B C 1C
IC1201	A C 3B
IC1202	A C 5A
IC1203	A C 5B
IC1401	B C 3D
IC1404	A C 3C
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IC1602	A C 6D
IC1603	B C 6C
IC1604	B C 6D
IC1701	B C 7D
IC1801	B C 2B
IC2101	A C 6B
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IC2201	A C 6E
IC2202	A C 5E
COIL	
L1004	B C 3F
L1801	A C 2B
L1802	A C 2B
TRANSISTOR	
Q1001	B C 3F
Q1002	B C 4F
Q1003	B C 4E
Q1004	B C 4E
Q1005	B C 4F
Q1006	B C 4F
Q1007	B C 4F
Q1008	A C 4E
Q1009	A C 4E
Q1010	A C 3E
Q1011	A C 3E
Q2201	B C 4E
RESISTOR	
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R1002	B C 1E
R1003	B C 1E
R1004	B C 1E
R1005	B C 1E
R1006	B C 1E
R1007	B C 1E
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R1065	A C 3D
R1066	A C 3E
R1067	A C 3D
R1068	A C 3E
R1069	A C 4E
R1070	A C 3E

REF.NO.	LOCATION
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R1072	B C 1E
R1216	A C 3A
R1217	A C 5B
R1218	B C 4B
R1219	B C 4B
R1220	B C 4B
R1221	B C 4B
R1222	A C 3A
R1223	A C 3A
R1224	A C 3A
R1225	A C 3A
R1226	A C 5B
R1227	B C 4B
R1228	B C 4B
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K2218	A C 5F
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T1801	A C 2B

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TM2	A C 1F
TM3	A C 8A
TM4	A C 8A
TM5	A C 7F
TM6	A C 7F
TM7	A C 1A
TM8	A C 1A
X1401	A C 2E
X1801	B C 3B

■ VOLTAGE CHARTS

<SWITCHING REGULATOR>

MODE PIN NO.	P.ON
IC5101	
1	308.2
2	0
3	0
4	16.7
5	2.4
IC5301	
1	2.4
2	0
3	4.6
IC5302	
1	0
2	5.8
3	3.0
4	0
5	2.5
6	0.9
7	0
8	5.9
9	3.5
10	0
11	0
12	0
13	0.9
14	1.9
15	1.9
16	4.8
IC5303	
1	3.3
2	0

PARTS LIST

[DR-MH20SE, DR-MH20SEF, DR-MH20SEK, DR-MH30SE, DR-MH30SEF, DR-MH30SEK, DR-MH30SER]

* SAFETY PRECAUTION
  Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.
* BEWARE OF BOGUS PARTS
  Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.
* (x_) in a description column shows the number of the used part.

Area Suffix

EK	U.K.
EF	France
ER	Russian Federation
E	Continental Europe
	Northern Europe

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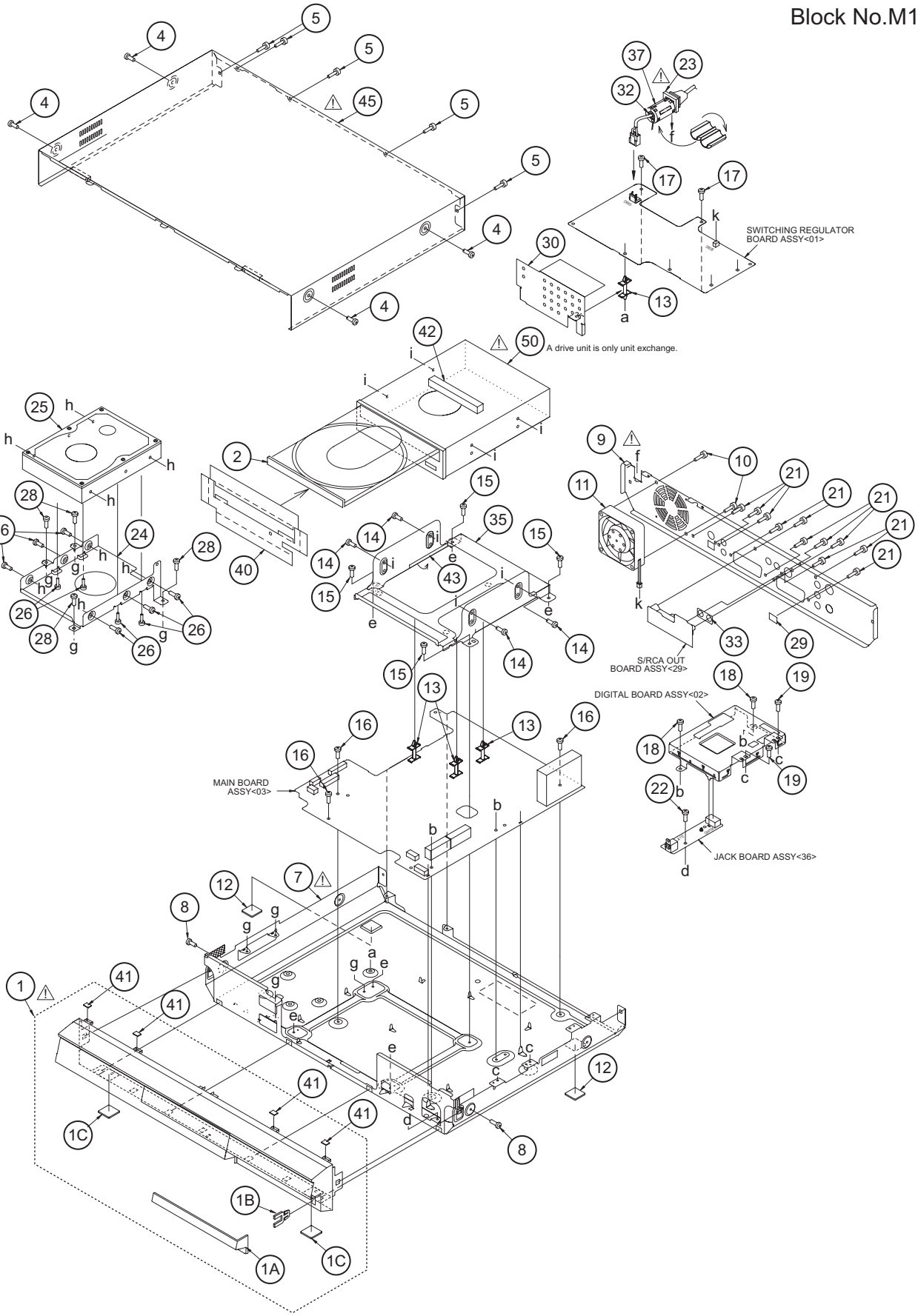
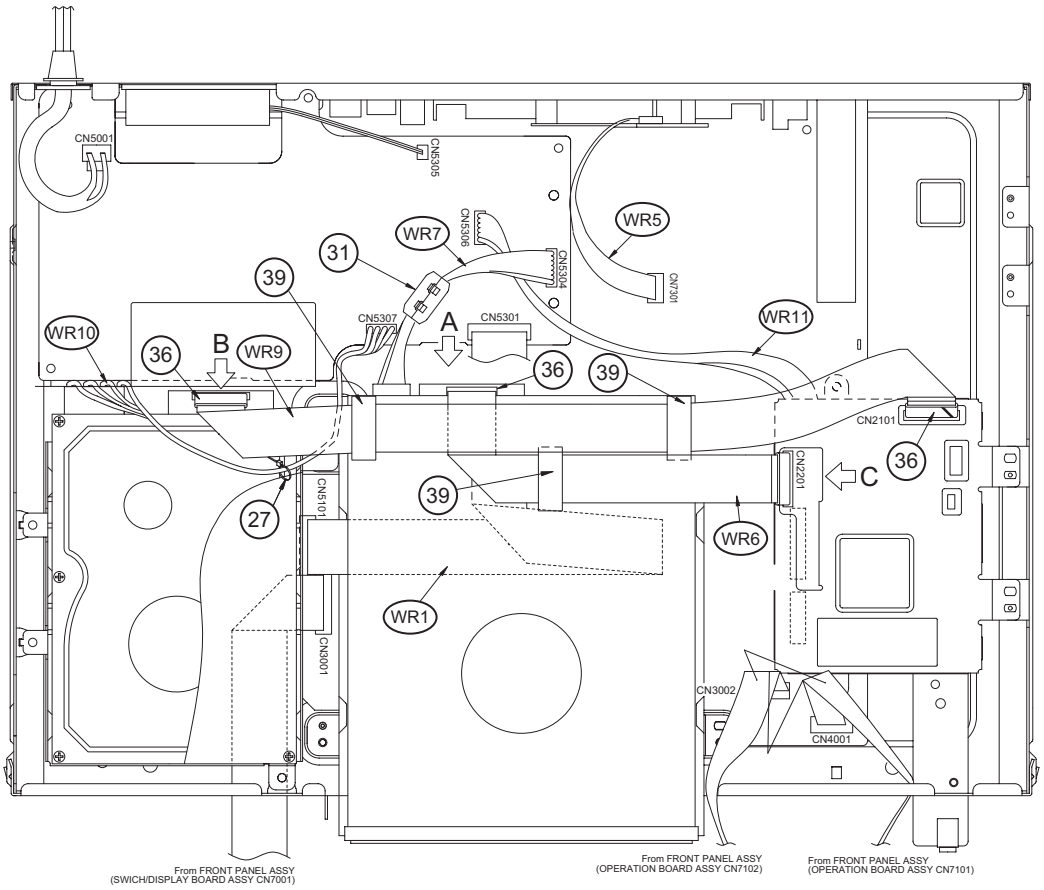
Packing materials and accessories parts list ---------- 3-17

Exploded view of general assembly and parts list

Block No.M1MM


SWITCHING REGULATOR BOARD ASSY<01>
A drive unit is only unit exchange.
S/RCA OUT BOARD ASSY<29>
DIGITAL BOARD ASSY<02>
MAIN BOARD ASSY<03>
JACK BOARD ASSY<36>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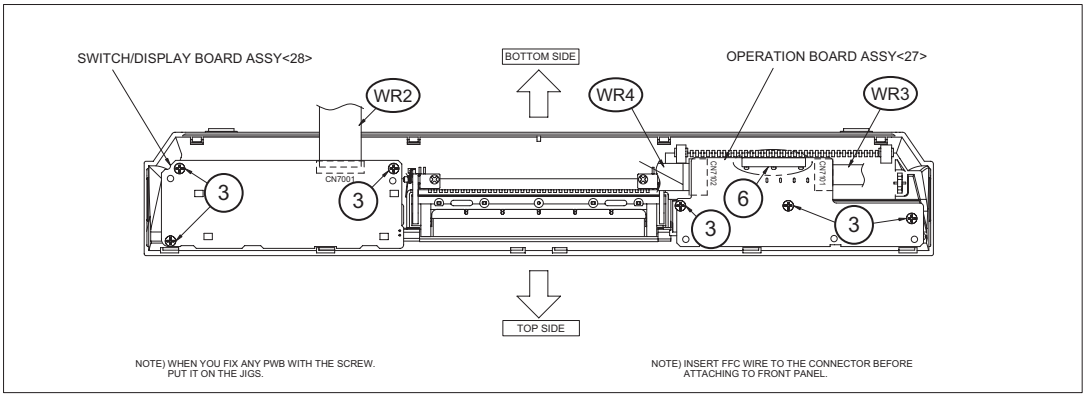
CN5305
CN5306
CN5304
WR7
31
39
WR5
CN7301
WR10
36
B
WR9
CN5307
A
CN5301
WR11
36
39
CN2101
36
C
CN2201
39
27
CN5101
WR6
WR1
CN3001
CN3002
CN4001
From FRONT PANEL ASSY
(SWICH/DISPLAY BOARD ASSY CN7001)
From FRONT PANEL ASSY
(OPERATION BOARD ASSY CN7102)
From FRONT PANEL ASSY
(OPERATION BOARD ASSY CN7101)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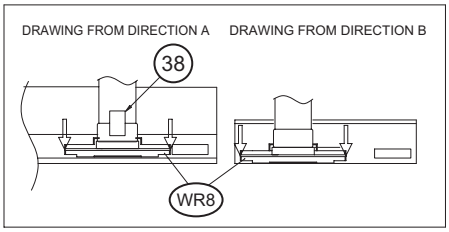
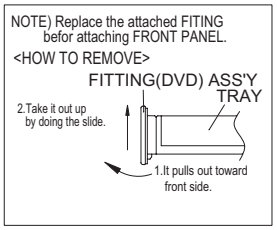
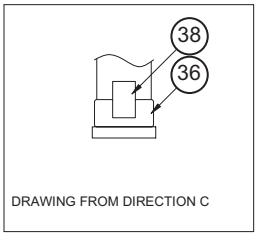
BOTTOM SIDE
OPERATION BOARD ASSY<27>
WR2
WR4
WR3
CN7001
CN7102
CN7101
3
3
6
3
3
TOP SIDE
NOTE) WHEN YOU FIX ANY PWB WITH THE SCREW.
PUT IT ON THE JIGS.
NOTE) INSERT FFC WIRE TO THE CONNECTOR BEFORE
ATTACHING TO FRONT PANEL.


DRAWING FROM DIRECTION A
DRAWING FROM DIRECTION B
38
WR8


NOTE) Replace the attached FITING
befor attaching FRONT PANEL.
<HOW TO REMOVE>
FITTING(DVD) ASS'Y
TRAY
2.Take it out up
by doing the slide.
1.It pulls out toward
front side.


38
36
DRAWING FROM DIRECTION C

General assembly

Block No. [M][1][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠ 1	LP10533-211B	FRONT PANEL ASSY		20E,20EF
⚠ 1	LP10533-212B	FRONT PANEL ASSY		20EK
⚠ 1	LP10533-210C	FRONT PANEL ASSY		30EK
⚠ 1	LP10533-209C	FRONT PANEL ASSY		30E,30EF,30ER
1A	LP21252-201A	DOOR		
1B	PU60109	CATCHER		
1C	LP31382-201A	FOOT	(x2)	
2	LP31372-005A	FITTING(DVD) ASSY		
3	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm FRONT BOARD(x6)	
4	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP SIDE(x4)	
5	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP REAR(x5)	
6	LP41175-001A	SPACER		
⚠ 7	LP10564-001A	BOTTOM CHASSIS		
8	QYSDSG3008NA	TAP SCREW	M3 x 8mm BOTTOM CHASSIS(x2)	
⚠ 9	LP21321-006A	REAR PANEL		20E,20EF,30E,30EF
⚠ 9	LP21321-007A	REAR PANEL		20EK,30EK
⚠ 9	LP21321-008A	REAR PANEL		30ER
10	QYSDSF3008MA	TAP SCREW	M3 x 8mm FAN(x2)	
11	QAR0326-001	FAN MOTOR		
12	LP31348-002A	FOOT	REAR(x2)	
13	PEME0946-08	SPACER	(x4)	
14	QYTDST3006ZA	TAP SCREW	M3 x 6mm DVD UNIT(x4)	
15	QYSDSGY3006ZA	TAP SCREW	M3 x 6mm DVD BRACKET(x4)	
16	QYSPSGG3006ZA	TAP SCREW	M3 x 6mm MAIN(x3)	
17	QYSPSGG3006ZA	TAP SCREW	M3 x 6mm REGULATOR(x2)	
18	QYSBSGG3008EA	TAP SCREW	M3 x 8mm DIGITAL(x2)	
19	QYSBSGG3008EA	TAP SCREW	M3 x 8mm DIGITAL(x2)	
21	QYSBSGY3008MA	TAP SCREW	M3 x 8mm REAR JACK(x11)	
22	QYSPSGG3006ZA	TAP SCREW	M3 x 6mm JACK BOARD	
⚠ 23	QMP51K0-170-K	POWER CORD	1.7m BLACK	20EK,30EK
⚠ 23	QMP4A10-170-K	POWER CORD	1.7m BLACK	20E,20EF,30E,30EF,30ER
24	LP21280-202A	BRACKET(HDD)		
25	LPH40267-006A	HDD	(SERVICE)	20EF
25	LPH40267-005A	HDD	(SERVICE)	20E,20EK
25	LPH40267-003A	HDD	(SERVICE)	30EF
25	LPH40267-002A	HDD	(SERVICE)	30E,30EK,30ER
26	LP40738-001B	SCREW	HDD(x10)	
27	PU43192-4	BINDER		
28	QYSDSGY3006ZA	TAP SCREW	M3 x 6mm HDD BRACKET(x4)	
29	LP41107-002A	GASKET		
30	LP31442-001A	PROTECT COVER		
31	QQR0917-002	CORE FILTER		
32	PU43192-4	BINDER		
33	LP41165-002A	GASKET		
35	LP21156-003A	BRACKET(DVD DRIVE)		
36	QQR1439-003	FERRITE CORE	(x4)	
37	QQR0491-001	FERRITE CORE		
38	LP30002-0F6A	SPACER	(x2)	
39	LP30002-0A9A	SPACER	(x3)	
40	LP31417-001A	SHIELD PLATE		
41	LP30002-0G2A	SPACER	(x4)	
42	LP41107-001A	GASKET		
43	LP30002-0H5A	SPACER	BRACKET(DVD)	
⚠ 45	LP21256-006A	METAL COVER	(SERVICE)	
⚠ 50	QAL0551-001	DRIVE UNIT		30EF
⚠ 50	QAL0551-002	DRIVE UNIT		20E,20EF,20EK,30E,30EK,30ER
WR 1	QUQ112-1926CJ	FFC WIRE	REGULATOR CN5301-MAIN CN5101	
WR 2	QUQ112-1818CJ	FFC WIRE	SWICH DISPLAY CN7001-MAIN CN3001	
WR 3	QUQ112-1312CG	FFC WIRE	OPERATION CN7101-MAIN CN3002	
WR 4	QUQ112-1112CG	FFC WIRE	OPERATION CN7102-MAIN CN4001	
WR 5	QUQ112-0714CG	FFC WIRE	S/RCA OUT CN7312-MAIN CN7301	
WR 6	QUQ605-4022AH	FFC WIRE	DIGITAL CN2201-DVD UNIT	
WR 7	QJJ032-041214	SIN CR C-C WIRE	REGULATOR CN5303-DVD UNIT	
WR 8	QGZ0018A1-40	CONNECTOR	HDD & DVD UNIT(x2)	
WR 9	QUQ605-4038AH	FFC WIRE	HDD-DIGITAL CN2101	
WR10	QJJ032-042204	SIN CR C-C WIRE	HDD-REGULATOR CNCN5307	
WR11	QJJ015-062211	SIN CR C-C WIRE	REGULATOR CN5306-DIGITAL CN1401	

Electrical parts list

Switching regulator board

Block No. [0][1]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10237-04C	REGULATOR BOARD ASSY		
IC5101	STR-G6653-F9	IC		
IC5301	TL431/A/-T	IC		
IC5301 or	MM1431AT-T	IC		
IC5301 or	UTCTL431-T	IC		
IC5301 or	L5431-T	IC		
IC5302	MPD5S017	IC(HYBRID)		
IC5303	MM1563DF-X	IC		
IC5305	MM1565AF-X	IC		
IC5308	MM1665AH-X	IC		
Q5301	2SD2144S/UV/-T	TRANSISTOR		
Q5301 or	2SC3576-JVC-T	TRANSISTOR		
Q5302	UMD12N-W	DIGI TRANSISTOR		
Q5302 or	XP4313-W	DIGI TRANSISTOR		
Q5303	UMD12N-W	DIGI TRANSISTOR		
Q5303 or	XP4313-W	DIGI TRANSISTOR		
Q5304	2SA1585S/QR/-T	TRANSISTOR		
Q5305	DTC114EKA-X	TRANSISTOR		
Q5305 or	UN2211-X	TRANSISTOR		
Q5305 or	RT1N141C-X	DIGI TRANSISTOR		
Q5306	2SA1585S/QR/-T	TRANSISTOR		
Q5307	2SA1585S/QR/-T	TRANSISTOR		
Q5309	2SA1585S/QR/-T	TRANSISTOR		
Q5310	2SD1858/QR/-T	TRANSISTOR		
Q5311	DTC114EUA-X	DIGI TRANSISTOR		
Q5311 or	UN5211-X	DIGI TRANSISTOR		
Q5311 or	RN1302-X	DIGI TRANSISTOR		
Q5311 or	PDTC114EU-X	DIGI TRANSISTOR		
Q5311 or	RT1N141M-X	DIGI TRANSISTOR		
Q5312	DTC114EUA-X	DIGI TRANSISTOR		
Q5312 or	UN5211-X	DIGI TRANSISTOR		
Q5312 or	RN1302-X	DIGI TRANSISTOR		
Q5312 or	PDTC114EU-X	DIGI TRANSISTOR		
Q5312 or	RT1N141M-X	DIGI TRANSISTOR		
Q5316	2SD2144S/UV/-T	TRANSISTOR		
Q5316 or	2SC3576-JVC-T	TRANSISTOR		
D5001	D3SBA60	DIODE		
D5001 or	GBJ4J	BRIDGE DIODE		
D5101	SARS01-T2	SI DIODE		
D5103	AU01Z-T2	FR DIODE		
D5103 or	ERA18-04-T2	FR DIODE		
D5103 or	1SR153-400-T2	FR DIODE		
D5103 or	10ERB20-T2	FR DIODE		
D5103 or	1F4G-T2	FR DIODE		
D5104	1SS133-T2	DIODE		
D5104 or	1SS270A-T2	SI DIODE		
D5105	AU01Z-T2	FR DIODE		
D5105 or	ERA18-04-T2	FR DIODE		
D5105 or	1SR153-400-T2	FR DIODE		
D5105 or	10ERB40-T2	FR DIODE		
D5105 or	1F4G-T2	FR DIODE		
D5106	AU01Z-T2	FR DIODE		
D5106 or	ERA18-04-T2	FR DIODE		
D5106 or	1SR153-400-T2	FR DIODE		
D5106 or	10ERB20-T2	FR DIODE		
D5106 or	1F4G-T2	FR DIODE		
D5201	10ERB20-T2	FR DIODE		
D5201 or	ERA18-02-T2	FR DIODE		
D5202	AU01Z-T2	FR DIODE		
D5202 or	ERA18-04-T2	FR DIODE		
D5202 or	1SR153-400-T2	FR DIODE		
D5202 or	10ERB20-T2	FR DIODE		
D5202 or	1F4G-T2	FR DIODE		
D5203	AU01Z-T2	FR DIODE		
D5203 or	ERA18-02-T2	FR DIODE		
D5203 or	1SR153-400-T2	FR DIODE		
D5203 or	10ERB20-T2	FR DIODE		
D5203 or	1F4G-T2	FR DIODE		
D5204	RL2Z-LFB2	FR DIODE		
D5205	RK34-LFB2	SB DIODE		
D5206	RK34-LFB2	SB DIODE		
D5207	AU01Z-T2	FR DIODE		
D5207 or	ERA18-02-T2	FR DIODE		
D5207 or	1SR153-400-T2	FR DIODE		
D5207 or	10ERB20-T2	FR DIODE		
D5207 or	1F4G-T2	FR DIODE		
D5208	RK14LF-B2	SB DIODE		
D5210	RK34-LFB2	SB DIODE		
D5212	RL2Z-LFB2	FR DIODE		
D5213	RK34-LFB2	SB DIODE		
D5214	RK34-LFB2	SB DIODE		
D5301	MTZJ15A-T2	Z DIODE		
D5301 or	RD15ES/B1/-T2	Z DIODE		
D5302	1SS133-T2	DIODE		
D5302 or	1SS270A-T2	SI DIODE		
D5303	MTZJ27C-T2	Z DIODE		
D5303 or	RD27ES/B3/-T2	Z DIODE		
D5304	MTZJ12B-T2	Z DIODE		
D5304 or	RD12ES/B3/-T2	Z DIODE		
D5306	1SS133-T2	DIODE		
D5306 or	1SS270A-T2	SI DIODE		
D5307	RL2Z-LFB2	FR DIODE		
D5309	RD5.6ES/B3/-T2	Z DIODE		
D5309 or	MTZJ5.6C-T2	Z DIODE		
D5310	1A3G-T2	SI DIODE		
D5310 or	10EDB20-T2	SI DIODE		
D5310 or	ERA15-02-T2	SI DIODE		
D5314	1S4-T2	SB DIODE		
D5314 or	AW04-T2	SB DIODE		
D5314 or	SBO40-T2	SB DIODE		
D5315	RD12ES/B1/-T2	Z DIODE		
D5315 or	MTZJ12A-T2	Z DIODE		
D5317	RK14LF-B2	SB DIODE		
D5317 or	21DQ04-F	SB DIODE		
D5317 or	SB240-F26	SB DIODE		
⚠ PC5101	PC123Y22FZ	PHOTO COUPLER		
⚠ C5001	QFZ9077-683	MPP CAPACITOR	0.068uF 275V M	
⚠ C5002	QFZ9077-223	MPP CAPACITOR	0.022uF 275V M	
C5003	QEZ0374-107	E CAPACITOR	100uF 400V M	
⚠ C5004	QCZ9079-222	C CAPACITOR	2200pF AC250V M	
C5101	QCZ0339-101Z	C CAPACITOR	100pF 1kV K	
C5102	QCZ0349-472Z	C CAPACITOR	4700pF 1kV K	
C5103	QEMU1VM-276Z	E CAPACITOR	27uF 35V M	
C5104	QCZ0136-471Z	C CAPACITOR	470pF 1kV K	
C5105	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
C5106	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C5107	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C5201	QEMX0JM-227Z	E CAPACITOR	220uF 6.3V M	
C5202	QEMU1HM-186Z	E CAPACITOR	18uF 50V M	
C5203	QEMT1CM-687	E CAPACITOR	680uF 16V M	
C5204	QEMT1CM-128	E CAPACITOR	1200uF 16V M	
C5205	QEMT1AM-158	E CAPACITOR	1500uF 10V M	
C5206	QEMT1AM-128	E CAPACITOR	1200uF 10V M	
C5207	QETN2AM-475Z	E CAPACITOR	4.7uF 100V M	
C5208	QEMT1AM-108	E CAPACITOR	1000uF 10V M	
C5209	QEMT1AM-158	E CAPACITOR	1500uF 10V M	
C5301	QFVF1HJ-154Z	MF CAPACITOR	0.15uF 50V J	
C5302	QFLC1HJ-333Z	M CAPACITOR	0.033uF 50V J	
C5303	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5304	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5305	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5306	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5307	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5308	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5309	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C5310	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5311	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C5312	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5313	QETN1HM-226Z	E CAPACITOR	22uF 50V M	
C5314	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5315	NCB31HK-471X	C CAPACITOR	470pF 50V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C5316	QETN1HM-226Z	E CAPACITOR	22uF 50V M	
C5317	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5318	QECS1CM-477	E CAPACITOR	470uF 16V M	
C5319	QECS1CM-477	E CAPACITOR	470uF 16V M	
C5321	QECS1CM-477	E CAPACITOR	470uF 16V M	
C5322	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5328	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
C5329	QETN1CM-106Z	E CAPACITOR	10uF 16V M	
C5330	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
C5331	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C5334	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5335	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C5338	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5339	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C5340	QETN1HM-226Z	E CAPACITOR	22uF 50V M	
C5341	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C5342	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
R5101	QRG02GJ-683	OMF RESISTOR	68kΩ 2W J	
R5102	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R5103	QRE141J-684Y	C RESISTOR	680kΩ 1/4W J	
R5104	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5105	QRE141J-680Y	C RESISTOR	68Ω 1/4W J	
R5106	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R5107	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R5108	QRT01DJ-R27X	MF RESISTOR	0.27Ω 1W J	
⚠ R5109	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
R5301	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R5302	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R5303	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R5304	NRSA63D-682X	MG RESISTOR	6.8kΩ 1/16W D	
R5305	NRSA63D-223X	MG RESISTOR	22kΩ 1/16W D	
R5306	NRSA63D-392X	MG RESISTOR	3.9kΩ 1/16W D	
⚠ R5307	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
R5308	QRE141J-681Y	C RESISTOR	680Ω 1/4W J	
R5309	QRE141J-561Y	C RESISTOR	560Ω 1/4W J	
R5310	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5311	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R5312	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5313	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R5316	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5317	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
R5318	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R5319	QRE141J-8R2Y	C RESISTOR	8.2Ω 1/4W J	
R5320	QRE123J-101X	C RESISTOR	100Ω 1/2W J	
R5321	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5322	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5323	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R5324	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5332	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D	
R5333	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R5334	NRSA63D-123X	MG RESISTOR	12kΩ 1/16W D	
R5335	NRSA63D-123X	MG RESISTOR	12kΩ 1/16W D	
R5336	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R5337	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R5341	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5343	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
L5201	PELN1184	CHOKE COIL		
L5202	PELN1184	CHOKE COIL		
L5203	PELN1184	CHOKE COIL		
L5204	PELN1184	CHOKE COIL		
L5205	PELN1184	CHOKE COIL		
L5206	PELN1184	CHOKE COIL		
⚠ T5001	QQS0268-001	SW TRANSF		
B5508	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
⚠ CN5001	QGA7901C3-02	CONNECTOR	W-B (1-2)	
CN5301	QGF1207C1-19	CONNECTOR	FFC/FPC (1-19)	
CN5303	QGA2501C1-04	CONNECTOR	W-B (1-4)	
CN5305	QGA2001C1-02	CONNECTOR	W-B (1-2)	
CN5306	QGA2001C1-06	CONNECTOR	W-B (1-6)	
CN5307	QGA2501C1-04	CONNECTOR	W-B (1-4)	
⚠ CP5301	QMFZ050-1R5X-E	FUSE	1.5A 125V	
⚠ CP5302	QMFZ050-2R0X-E	FUSE	2A 125V	
⚠ F5001	QMF51E2-2R0-J1	FUSE	2A AC250V	
FC5001	QNG0020-001Z	FUSE CLIP		
FC5002	QNG0020-001Z	FUSE CLIP		

⚠ Symbol No.	Part No.	Part Name	Description	Local
HS1	PEME0889-01-01	HEAT SINK		
⚠ LF5001	QQR1031-001	LINE FILTER		
ST1	PU59391	STYLE PIN		
W5501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W5502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W5503	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
OT1	QYTDST3008ZA	TAP SCREW	M3 x 8mm	

Digital board

Block No. [0][2]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10247-03E	DIGITAL BOARD ASSY		
IC1001	JCP8059	IC		
IC1002	HY57V161610ET-8	IC		
IC1002 or	K4S161622H-TC80	IC		
IC1002 or	M12L16161A-7TG	IC		
IC1002 or	HY57V161610ETP7	IC		
IC1002 or	MT48LC1M16TG-7S	IC		
IC1201	LPN0877-001A	IC(FLASH)	(SERVICE)	
IC1202	SN74LVC373APW-X	IC(DIGITAL)		
IC1203	SN74LVC373APW-X	IC(DIGITAL)		
IC1401	DMN8652-B0	IC(DIGITAL)		
IC1404	SN74HCT08APW-X	IC		
IC1405	SN74LV08APW-X	IC		
IC1601	HY5DU561622CT-J	IC		
IC1601 or	HYB25D256160CE6	IC		
IC1602	HY5DU561622CT-J	IC		
IC1602 or	HYB25D256160CE6	IC		
IC1603	HY5DU561622CT-J	IC		
IC1603 or	HYB25D256160CE6	IC		
IC1604	HY5DU561622CT-J	IC		
IC1604 or	HYB25D256160CE6	IC		
IC1701	PQ015YZ01Z-X	IC		
IC1801	TSB41AB2PAP	IC		
Q1002	2SA1037AK/QR/-X	TRANSISTOR		
Q1002 or	2SA1530A/QR/-X	SI TRANSISTOR		
Q1002 or	2SB709A/QR/-X	TRANSISTOR		
Q1003	2SA1037AK/QR/-X	TRANSISTOR		
Q1003 or	2SA1530A/QR/-X	SI TRANSISTOR		
Q1003 or	2SB709A/QR/-X	TRANSISTOR		
Q1004	2SA1037AK/QR/-X	TRANSISTOR		
Q1004 or	2SA1530A/QR/-X	SI TRANSISTOR		
Q1004 or	2SB709A/QR/-X	TRANSISTOR		
Q1005	2SA1037AK/QR/-X	TRANSISTOR		
Q1005 or	2SA1530A/QR/-X	SI TRANSISTOR		
Q1005 or	2SB709A/QR/-X	TRANSISTOR		
Q1006	2SA1037AK/QR/-X	TRANSISTOR		
Q1006 or	2SA1530A/QR/-X	SI TRANSISTOR		
Q1006 or	2SB709A/QR/-X	TRANSISTOR		
Q1007	2SA1037AK/QR/-X	TRANSISTOR		
Q1007 or	2SA1530A/QR/-X	SI TRANSISTOR		
Q1007 or	2SB709A/QR/-X	TRANSISTOR		
Q1008	UMZ1N-W	PAIR TRANSISTOR		
Q1008 or	BC847PN-X	PAIR TRANSISTOR		
Q1008 or	BC846PN-X	PAIR TRANSISTOR		
Q1009	2SC2412K/QRS/-X	TRANSISTOR		
Q1009 or	2SC3928A/QRS/-X	TRANSISTOR		
Q1009 or	2SD601A/QRS/-X	TRANSISTOR		
Q1010	2SC2412K/QRS/-X	TRANSISTOR		
Q1010 or	2SC3928A/QRS/-X	TRANSISTOR		
Q1010 or	2SD601A/QRS/-X	TRANSISTOR		
Q1011	2SC2412K/QRS/-X	TRANSISTOR		
Q1011 or	2SC3928A/QRS/-X	TRANSISTOR		
Q1011 or	2SD601A/QRS/-X	TRANSISTOR		
D1001	1SS355-X	SI DIODE		
D1001 or	MA111-X	SI DIODE		
D1002	1SS355-X	SI DIODE		
D1002 or	MA111-X	SI DIODE		
D1401	1SS355-X	SI DIODE		

⚠ Symbol No.	Part No.	Part Name	Description	Local
D1401	or MA111-X	SI DIODE		
D1402	1SS355-X	SI DIODE		
D1402	or MA111-X	SI DIODE		
D1403	1SS355-X	SI DIODE		
D1403	or MA111-X	SI DIODE		
C1001	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1002	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1003	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1005	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1007	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1008	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1009	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1012	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1014	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1017	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1018	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1019	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1020	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1026	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1030	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1034	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1035	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1036	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1038	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1039	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1041	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1042	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1043	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1044	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1045	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1046	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1047	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1051	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1052	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1053	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C1060	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1062	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1065	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C1077	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1080	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1081	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1082	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1083	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1090	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1091	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1092	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1093	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1094	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1095	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1096	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1097	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1098	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1203	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1204	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C1206	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1207	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1401	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1402	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1404	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C1405	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1406	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1408	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1409	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1411	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M	
C1412	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1413	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C1414	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1416	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1417	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1418	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1420	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1421	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1422	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1423	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1424	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1425	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1427	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1428	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1429	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1430	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1435	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1436	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1437	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1438	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1439	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1442	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1444	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1445	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1446	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1447	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1448	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1450	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1452	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1453	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1455	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1457	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1458	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1461	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1463	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1464	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1465	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1466	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1467	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1468	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1469	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1470	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1471	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1472	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1473	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1474	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1475	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1601	NEZ0019-157X	OS E CAPACITOR	150uF 4V M	
C1602	NEZ0019-157X	OS E CAPACITOR	150uF 4V M	
C1605	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1606	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1607	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1608	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1609	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1610	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1611	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1612	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1613	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1614	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1615	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1616	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1617	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1618	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1619	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1620	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1621	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1622	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1623	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1624	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1625	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1626	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1627	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1628	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1629	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1630	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1631	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1632	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1633	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1634	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1635	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1636	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1642	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1644	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1646	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1650	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1652	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1654	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1656	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1658	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1660	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1662	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1701	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1702	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M	
C1703	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1704	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M	
C1706	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1707	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1708	NBE20JM-476X	TA E CAPACITOR	47uF 6.3V M	
C1710	NBE20JM-476X	TA E CAPACITOR	47uF 6.3V M	
C1801	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1802	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C1803	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1804	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1805	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1806	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1807	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1808	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C1809	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C1811	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1812	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
R1001	NRSA63D-221X	MG RESISTOR	220Ω 1/16W D	
R1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1005	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1007	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1009	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1013	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1014	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1015	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1017	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1021	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R1022	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R1024	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D	
R1027	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1028	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1029	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1030	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1031	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1032	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1033	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1035	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1036	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1037	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
R1038	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1039	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1040	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
R1041	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1042	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1043	NRSA63D-151X	MG RESISTOR	150Ω 1/16W D	
R1044	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1045	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1046	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R1047	NRSA63D-201X	MG RESISTOR	200Ω 1/16W D	
R1048	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1049	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1050	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R1051	NRSA63D-271X	MG RESISTOR	270Ω 1/16W D	
R1052	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1053	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1054	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R1055	NRSA63D-181X	MG RESISTOR	180Ω 1/16W D	
R1056	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R1057	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R1059	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1060	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1061	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1065	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R1066	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1067	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R1068	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1069	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1070	NRSA63D-122X	MG RESISTOR	1.2kΩ 1/16W D	
R1071	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R1072	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1217	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1218	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1219	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1220	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1221	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1222	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1225	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1226	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1229	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1230	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1231	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1401	NRSA63F-1181X	MG RESISTOR	1.18kΩ 1/16W F	
R1402	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1408	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1409	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1410	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1411	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1412	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1413	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1414	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1415	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1416	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1417	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1419	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1420	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1427	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1428	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1429	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1430	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1431	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1434	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1435	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1436	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1437	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1438	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1439	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1440	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1441	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1443	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1444	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1445	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1446	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1447	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1448	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1449	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1450	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1451	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1452	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1453	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1458	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1459	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1460	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1461	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1462	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1465	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1466	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1467	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1468	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1469	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1470	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1471	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1472	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1473	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1474	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1475	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1476	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1477	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1478	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1479	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1480	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R1481	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R1482	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1483	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1491	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1493	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1494	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1495	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1601	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1602	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1603	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1604	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1605	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1606	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1607	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1608	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1613	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1614	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1615	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1616	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1617	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1618	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1619	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1620	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1621	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1622	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1623	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1624	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1625	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1626	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1627	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1628	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1629	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1630	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1631	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1632	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1641	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1642	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1643	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1644	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1653	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1654	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1655	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1656	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1657	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1658	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1659	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1660	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1701	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R1702	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1703	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1704	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1801	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1802	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1803	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1804	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1805	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1807	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1809	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1810	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
R1812	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1813	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1814	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1815	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1816	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1817	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R1818	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D	
R1819	NRSA63D-751X	MG RESISTOR	750Ω 1/16W D	
R1820	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1821	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1822	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2101	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2102	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2103	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R2104	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2105	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2106	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2107	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2108	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2109	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2110	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2111	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2112	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2113	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2114	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2115	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2201	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2202	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R2203	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2204	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2205	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2206	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2207	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2208	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2209	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2210	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2211	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2212	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2213	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2214	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2215	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
RA1001	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA1002	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA1003	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1004	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1005	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1006	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1201	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1202	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1203	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1204	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1401	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1402	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1403	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1404	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1405	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1406	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1407	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1408	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1409	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1410	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1411	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1609	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1610	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1611	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1612	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1613	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1614	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1615	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1616	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1617	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1618	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1619	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1620	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1621	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1622	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1623	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1624	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1625	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1626	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1627	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1628	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1629	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1630	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1631	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1632	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1801	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1802	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA2101	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2102	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2103	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2104	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2208	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2209	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2210	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2211	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
L1004	NQL144K-100X	P COIL	10uH K	
L1801	NQL144K-100X	P COIL	10uH K	
T1801	NQR0444-001X	CHOKE COIL		

⚠ Symbol No.	Part No.	Part Name	Description	Local
B1001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B1007	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B1008	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B1202	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B1405	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B1802	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CN1001	QGB2027L5-28X	CONNECTOR	B-B (1-28)	
CN1002	QGB2027L5-20X	CONNECTOR	B-B (1-20)	
CN1003	QGA2001F2-06V	CONNECTOR	W-B (1-6)	
CN1402	QGA2001C2-04V	CONNECTOR	W-B (1-4)	
CN1403	QGF1016C2-04W	CONNECTOR	FFC/FPC (1-4)	
CN1801	QGB2027L1-10X	CONNECTOR	B-B (1-10)	
CN2101	QGF0539C1-40W	CONNECTOR	FFC/FPC (1-40)	
CN2201	QGF0539C1-40W	CONNECTOR	FFC/FPC (1-40)	
K1001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1003	NQR0129-002X	FERRITE BEADS		
K1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1005	NQR0129-002X	FERRITE BEADS		
K1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1007	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1010	NQR0129-002X	FERRITE BEADS		
K1011	NQR0129-002X	FERRITE BEADS		
K1012	NQR0129-002X	FERRITE BEADS		
K1013	NQR0129-002X	FERRITE BEADS		
K1014	NQR0129-002X	FERRITE BEADS		
K1015	NQR0129-002X	FERRITE BEADS		
K1016	NQR0129-002X	FERRITE BEADS		
K1017	NQR0129-002X	FERRITE BEADS		
K1018	NQR0129-002X	FERRITE BEADS		
K1019	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1020	NQR0129-002X	FERRITE BEADS		
K1021	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1022	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1023	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1401	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1402	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1403	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1404	NQR0339-001X	FERRITE BEADS		
K1406	NQR0339-001X	FERRITE BEADS		
K1407	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1408	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1701	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1702	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1801	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K2101	NQR0129-002X	FERRITE BEADS		
K2102	NQR0129-002X	FERRITE BEADS		
K2103	NQR0129-002X	FERRITE BEADS		
K2104	NQR0129-002X	FERRITE BEADS		
K2105	NQR0129-002X	FERRITE BEADS		
K2106	NQR0129-002X	FERRITE BEADS		
K2107	NQR0129-002X	FERRITE BEADS		
K2108	NQR0129-002X	FERRITE BEADS		
K2109	NQR0129-002X	FERRITE BEADS		
K2110	NQR0129-002X	FERRITE BEADS		
K2111	NQR0129-002X	FERRITE BEADS		
K2112	NQR0129-002X	FERRITE BEADS		
K2113	NQR0129-002X	FERRITE BEADS		
K2114	NQR0129-002X	FERRITE BEADS		
K2115	NQR0129-002X	FERRITE BEADS		
K2116	NQR0129-002X	FERRITE BEADS		
K2117	NQR0129-002X	FERRITE BEADS		
K2118	NQR0129-002X	FERRITE BEADS		
K2119	NQR0129-002X	FERRITE BEADS		
K2120	NQR0129-002X	FERRITE BEADS		
K2121	NQR0129-002X	FERRITE BEADS		
K2201	NQR0129-002X	FERRITE BEADS		
K2202	NQR0129-002X	FERRITE BEADS		
K2203	NQR0129-002X	FERRITE BEADS		
K2204	NQR0129-002X	FERRITE BEADS		
K2205	NQR0129-002X	FERRITE BEADS		
K2206	NQR0129-002X	FERRITE BEADS		
K2207	NQR0129-002X	FERRITE BEADS		
K2208	NQR0129-002X	FERRITE BEADS		
K2209	NQR0129-002X	FERRITE BEADS		
K2210	NQR0129-002X	FERRITE BEADS		
K2211	NQR0129-002X	FERRITE BEADS		
K2212	NQR0129-002X	FERRITE BEADS		
K2213	NQR0129-002X	FERRITE BEADS		
K2214	NQR0129-002X	FERRITE BEADS		
K2215	NQR0129-002X	FERRITE BEADS		
K2216	NQR0129-002X	FERRITE BEADS		
K2217	NQR0129-002X	FERRITE BEADS		
K2218	NQR0129-002X	FERRITE BEADS		
K2219	NQR0129-002X	FERRITE BEADS		
K2220	NQR0129-002X	FERRITE BEADS		
K2221	NQR0129-002X	FERRITE BEADS		
LC1401	NQR0512-008X	EMI FILTER		
LC1402	NQR0512-008X	EMI FILTER		
LC1403	NQR0512-008X	EMI FILTER		
SD1	LP21279-001A	SHIELD CASE		
X1401	NAX0580-001X	CXO	27.0000MHz	
X1801	NAX0551-001X	CRYSTAL	24.576MHz	
OT1	LC41656-001A	COOLING SHEET		

Main board

Block No. [0][3]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-04F1	MAIN BOARD ASSY		20EF,30EF
PW1	LPA10239-05E1	MAIN BOARD ASSY		20EK,30EK
PW1	LPA10239-06E1	MAIN BOARD ASSY		20E,30E,30ER
IC3001	HD6432194SXE01F	IC(MCU)	MASK	
IC3002	IC-PST3427U-X	IC		
IC3004	LPN0876-003B-33	IC(EEPROM)	*(REFER TO BELOW)	20EF,30EF
IC3004	LPN0876-001B-32	IC(EEPROM)	*(REFER TO BELOW)	20EK,30EK
IC3004	LPN0876-002B-31	IC(EEPROM)	*(REFER TO BELOW)	20E,30E,30ER
IC4001	JCP8038-I	IC		
IC4001 or	JCP8038	IC		
IC4201	LC74793	IC		
IC4301	LA7357M-W	IC		20EF,30EF
IC4304	74HC4538D-X	IC		20EF,30EF
IC6701	MSP3417GQGB8V3X	IC		
IC6701 or	MSP3417G-X	IC		
IC7301	MM1623XF-X	IC		
IC7302	MM1508XN-X	IC		
IC7303	TC74HC4053AF-X	IC		
IC7303 or	CD74HC4053NS-X	IC		
IC7304	MM1501XN-X	IC		
IC8001	AK5365VQ	IC		
IC8201	AK4385VT-X	IC		
IC8201 or	AK4381VT-X	IC		
IC8202	BA15218F-XE	IC		
IC8301	LA7151M-X	IC		
IC8302	LA7151M-X	IC		
IC8303	BA15218F-XE	IC		
IC8501	SN74LV08APW-X	IC		
Q3004	2SC2412K/QRS/-X	TRANSISTOR		
Q3004 or	2SD601A/QRS/-X	TRANSISTOR		
Q3004 or	2SC3928A/QRS/-X	TRANSISTOR		
Q3007	UN221E-X	TRANSTSTOR		
Q3007 or	DTC144WKA-X	DIGI TRANSISTOR		
Q3007 or	RT1N44HC-X	DIGI TRANSISTOR		
Q3009	UN221E-X	TRANSTSTOR		
Q3009 or	DTC144WKA-X	DIGI TRANSISTOR		
Q3009 or	RT1N44HC-X	DIGI TRANSISTOR		
Q3010	UN221E-X	TRANSTSTOR		
Q3010 or	DTC144WKA-X	DIGI TRANSISTOR		
Q3010 or	RT1N44HC-X	DIGI TRANSISTOR		
Q4001	2SB709A/QR/-X	TRANSISTOR		
Q4001 or	2SA1037AK/QR/-X	TRANSISTOR		
Q4001 or	2SA1530A/QR/-X	SI TRANSISTOR		
Q4003	2SD601A/QRS/-X	TRANSISTOR		
Q4003 or	2SC2412K/QRS/-X	TRANSISTOR		
Q4003 or	2SC3928A/QRS/-X	TRANSISTOR		

After exchanging EEPROMs, a main part does not correspond to some remote control commands at Jig RCU mode. Please cancel the Jig RCU mode of a main part after exchanging EEPROMs. Please refer to the "Canceling JIG mode" about the release method.

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q4006	2SC2412K/QRS/-X	TRANSISTOR		
Q4006	or 2SC3928A/QRS/-X	TRANSISTOR		
Q4101	2SD2144S/UV/-T	TRANSISTOR		
Q4101	or 2SC3576-JVC-T	TRANSISTOR		
Q4301	2SD601A/QRS/-X	TRANSISTOR		20EF,30EF
Q4301	or 2SC2412K/QRS/-X	TRANSISTOR		20EF,30EF
Q4301	or 2SC3928A/QRS/-X	TRANSISTOR		20EF,30EF
Q4302	2SB709A/QR/-X	TRANSISTOR		20EF,30EF
Q4302	or 2SA1037AK/QR/-X	TRANSISTOR		20EF,30EF
Q4302	or 2SA1530A/QR/-X	TRANSISTOR		20EF,30EF
Q4303	2SB709A/QR/-X	TRANSISTOR		20EF,30EF
Q4303	or 2SA1037AK/QR/-X	TRANSISTOR		20EF,30EF
Q4303	or 2SA1530A/QR/-X	TRANSISTOR		20EF,30EF
Q6030	2SA1037AK/QR/-X	TRANSISTOR		
Q6030	or 2SB709A/QR/-X	TRANSISTOR		
Q6030	or 2SA1530A/QR/-X	SI TRANSISTOR		
Q6031	UN2211-X	TRANSISTOR		
Q6031	or DTC114EKA-X	TRANSISTOR		
Q6031	or RT1N141C-X	DIGI TRANSISTOR		
Q7201	2SC1317/RS/-T	TRANSISTOR		
Q7301	2SD601A/QRS/-X	TRANSISTOR		
Q7301	or 2SC2412K/QRS/-X	TRANSISTOR		
Q7301	or 2SC3928A/QRS/-X	TRANSISTOR		
Q7302	2SD601A/QRS/-X	TRANSISTOR		
Q7302	or 2SC2412K/QRS/-X	TRANSISTOR		
Q7302	or 2SC3928A/QRS/-X	TRANSISTOR		
Q7310	2SB709A/QR/-X	TRANSISTOR		
Q7310	or 2SA1037AK/QR/-X	TRANSISTOR		
Q7310	or 2SA1530A/QR/-X	SI TRANSISTOR		
Q7311	2SB709A/QR/-X	TRANSISTOR		
Q7311	or 2SA1037AK/QR/-X	TRANSISTOR		
Q7311	or 2SA1530A/QR/-X	SI TRANSISTOR		
Q7312	UN221E-X	TRANSTSTOR		
Q7312	or DTC144WKA-X	DIGI TRANSISTOR		
Q7312	or RT1N44HC-X	DIGI TRANSISTOR		
Q7313	UN221E-X	TRANSTSTOR		
Q7313	or DTC144WKA-X	DIGI TRANSISTOR		
Q7313	or RT1N44HC-X	DIGI TRANSISTOR		
Q7314	UN221E-X	TRANSTSTOR		
Q7314	or DTC144WKA-X	DIGI TRANSISTOR		
Q7314	or RT1N44HC-X	DIGI TRANSISTOR		
Q7315	DTC114TKA-X	TRANSISTOR		
Q7315	or RT1N140C-X	DIGI TRANSISTOR		
Q7315	or UN2215-X	TRANSISTOR		
Q7316	2SB709A/QR/-X	TRANSISTOR		
Q7316	or 2SA1037AK/QR/-X	TRANSISTOR		
Q7316	or 2SA1530A/QR/-X	SI TRANSISTOR		
Q7317	2SB709A/QR/-X	TRANSISTOR		
Q7317	or 2SA1037AK/QR/-X	TRANSISTOR		
Q7317	or 2SA1530A/QR/-X	SI TRANSISTOR		
Q8201	UN221E-X	TRANSTSTOR		
Q8201	or DTC144WKA-X	DIGI TRANSISTOR		
Q8201	or RT1N44HC-X	DIGI TRANSISTOR		
Q8202	UN211E-X	DIGI TRANSISTOR		
Q8202	or DTA144WKA-X	TRANSISTOR		
Q8202	or RT1P44HC-X	DIGI TRANSISTOR		
Q8203	2SC2412K/QRS/-X	TRANSISTOR		
Q8203	or 2SD601A/QRS/-X	TRANSISTOR		
Q8203	or 2SC3928A/QRS/-X	TRANSISTOR		
Q8205	2SC2412K/QRS/-X	TRANSISTOR		
Q8205	or 2SD601A/QRS/-X	TRANSISTOR		
Q8205	or 2SC3928A/QRS/-X	TRANSISTOR		
Q8301	2SC2412K/QRS/-X	TRANSISTOR		
Q8301	or 2SD601A/QRS/-X	TRANSISTOR		
Q8301	or 2SC3928A/QRS/-X	TRANSISTOR		
Q8302	2SC2412K/QRS/-X	TRANSISTOR		
Q8302	or 2SD601A/QRS/-X	TRANSISTOR		
Q8302	or 2SC3928A/QRS/-X	TRANSISTOR		
Q8303	2SC2412K/QRS/-X	TRANSISTOR		
Q8303	or 2SD601A/QRS/-X	TRANSISTOR		
Q8303	or 2SC3928A/QRS/-X	TRANSISTOR		
Q8304	2SC2412K/QRS/-X	TRANSISTOR		
Q8304	or 2SD601A/QRS/-X	TRANSISTOR		
Q8304	or 2SC3928A/QRS/-X	TRANSISTOR		
D3002	1SS133-T2	DIODE		
D3002	or 1SS270A-T2	SI DIODE		
D3003	RD39ES/B3/-T2	Z DIODE		
D3003	or MTZJ39C-T2	Z DIODE		
D3004	10EDB20-T2	SI DIODE		
D3004	or 1A3G-T2	SI DIODE		
D3005	10EDB20-T2	SI DIODE		
D3005	or 1A3G-T2	SI DIODE		
D3007	1SS355-X	SI DIODE		
D3007	or MA111-X	SI DIODE		
D3008	1SS355-X	SI DIODE		
D3008	or MA111-X	SI DIODE		
D4001	DA204U-X	SI DIODE		
D4002	DA204U-X	SI DIODE		
D4301	1SS133-T2	DIODE		20EF,30EF
D6002	HZ30-2L-T2	Z DIODE		
D6002	or HZ30-2LTD	Z DIODE		
D6701	1SS133-T2	DIODE		
D6701	or 1SS270A-T2	SI DIODE		
D7304	1SS133-T2	DIODE		
D8001	1SS355-X	SI DIODE		
D8001	or MA111-X	SI DIODE		
D8202	1SS355-X	SI DIODE		
C3007	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3010	QEZ0244-229	EDL CAPACITOR	0.022F 5.5V Z	
C3014	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C3015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3016	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3022	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3024	NDC31HJ-120X	C CAPACITOR	12pF 50V J	20EF,20EK,30EF,30EK
C3024	NDC31HJ-220X	C CAPACITOR	22pF 50V J	20E,30E,30ER
C3025	QAT3725-300Z	TRIM CAPACITOR	30pF TIMER CLOCK	20E,30E,30ER
C3027	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C3030	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C3031	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3036	NDC31HJ-180X	C CAPACITOR	18pF 50V J	
C3037	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C3038	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C3039	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C3041	NDC31HJ-180X	C CAPACITOR	18pF 50V J	20EF,20EK,30EF,30EK
C3042	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C3050	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3051	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C3054	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4001	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C4002	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4003	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C4005	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4006	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4008	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C4010	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4012	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4013	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C4015	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4016	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4018	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C4019	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C4021	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4022	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4023	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4024	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4025	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4026	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4027	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4028	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C4029	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M	
C4030	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4033	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4034	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	
C4035	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4036	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4037	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4039	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4040	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4041	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4043	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C4045	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C4046	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C4047	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4049	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C4055	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C4056	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4065	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M	
C4067	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C4068	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C4069	NDC31HJ-821X	C CAPACITOR	820pF 50V J	
C4071	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4072	QERF0JM-107Z	E CAPACITOR	100uF 6.3V M	
C4081	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C4109	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C4110	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C4201	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C4202	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4203	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C4204	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C4207	NCB31CK-563X	C CAPACITOR	0.056uF 16V K	
C4208	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C4209	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C4210	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C4211	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4301	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	20EF,30EF
C4302	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C4304	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	20EF,30EF
C4305	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	20EF,30EF
C4306	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	20EF,30EF
C4307	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	20EF,30EF
C4308	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	20EF,30EF
C4309	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	20EF,30EF
C4310	NDC31HJ-471X	C CAPACITOR	470pF 50V J	20EF,30EF
C4318	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	20EF,30EF
C4319	NDC31HJ-471X	C CAPACITOR	470pF 50V J	20EF,30EF
C6006	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	20E,20EK,30E,30EK,30ER
C6007	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C6014	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6037	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	20EF,30EF
C6701	NCB21HK-102X	C CAPACITOR	1000pF 50V K	
C6707	NDC21HJ-470X	C CAPACITOR	47pF 50V J	
C6708	NDC21HJ-8R0X	C CAPACITOR	8pF 50V J	
C6709	NDC21HJ-8R0X	C CAPACITOR	8pF 50V J	
C6713	NCF21CZ-224X	C CAPACITOR	0.22uF 16V Z	
C6714	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C6715	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C6716	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C6717	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C6719	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C6720	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C6721	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6723	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6724	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	20EF,30EF
C6753	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C7202	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C7203	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C7301	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C7302	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7303	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7304	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7305	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C7306	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C7307	QEKJ0JM-226Z	E CAPACITOR	22uF 6.3V M	
C7308	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C7309	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C7310	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C7311	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7312	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7313	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7314	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7315	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C7316	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7317	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7318	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7319	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7327	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C7330	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7331	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7334	NDC31HJ-681X	C CAPACITOR	680pF 50V J	
C7335	NDC31HJ-681X	C CAPACITOR	680pF 50V J	
C7336	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C7337	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C7338	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C7339	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C7340	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C7345	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7346	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C7347	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C7350	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7351	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7354	NDC31HJ-681X	C CAPACITOR	680pF 50V J	
C7355	NDC31HJ-681X	C CAPACITOR	680pF 50V J	
C7368	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C7369	NDC31HJ-6R0X	C CAPACITOR	6pF 50V J	
C7371	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C8001	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C8002	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C8005	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C8007	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C8008	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C8009	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C8010	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C8011	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C8012	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C8014	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C8021	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8022	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8023	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C8024	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8025	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8026	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8027	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C8028	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8201	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8202	QETJ0JM-477Z	E CAPACITOR	470uF 6.3V M	
C8203	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C8204	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C8205	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C8206	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C8207	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C8208	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C8209	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8210	QETJ1CM-227Z	E CAPACITOR	220uF 16V M	
C8211	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8212	QETJ1CM-227Z	E CAPACITOR	220uF 16V M	
C8215	QETJ1EM-476Z	E CAPACITOR	47uF 25V M	
C8217	QETJ1EM-476Z	E CAPACITOR	47uF 25V M	
C8220	NCF31EZ-104X	C CAPACITOR	0.1uF 25V Z	
C8301	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C8302	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8303	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8304	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8305	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8306	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8307	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8308	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8311	QETN1CM-477Z	E CAPACITOR	470uF 16V M	
C8312	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8313	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8314	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8315	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8316	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8317	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8318	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8321	QETN1CM-227Z	E CAPACITOR	220uF 16V M	
C8322	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8323	QETN1CM-227Z	E CAPACITOR	220uF 16V M	
C8324	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8401	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C8402	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8501	QEKC1CM-107Z	E CAPACITOR	100uF 16V M	
C8502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8503	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8504	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C8505	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C8506	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
R3011	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R3012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3016	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3017	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3018	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R3022	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3028	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3029	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3038	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3039	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3040	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3041	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3044	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3046	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3047	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3048	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3049	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3050	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3051	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3052	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3053	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3054	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3055	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3060	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3061	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3062	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3063	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3066	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3069	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3071	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3072	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3073	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3075	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3076	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3079	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3088	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3089	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3090	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3094	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3095	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3096	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3097	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3213	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R3214	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R3218	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3219	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3220	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3223	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3224	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3225	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3226	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3229	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R3230	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3231	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3233	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3234	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3235	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3236	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3237	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3239	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3240	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3242	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3248	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3249	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3251	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3252	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3256	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3257	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3258	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3260	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R4001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4007	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4010	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R4011	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R4017	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4018	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R4021	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R4026	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4027	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R4028	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R4029	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R4044	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R4045	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R4046	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R4047	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R4048	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4051	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4104	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R4105	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R4201	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R4203	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R4204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4205	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4207	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4208	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4209	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R4210	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R4211	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R4301	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	20EF,30EF
R4302	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	20EF,30EF
R4304	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	20EF,30EF
R4305	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	20EF,30EF
R4306	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	20EF,30EF
R4307	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	20EF,30EF
R4308	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	20EF,30EF
R4309	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	20EF,30EF
R4310	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	20EF,30EF
R4311	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	20EF,30EF
R4312	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	20EF,30EF
R4317	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	20EF,30EF
R4318	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	20EF,30EF
R4319	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	20EF,30EF
R4320	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	20EF,30EF
R6020	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6021	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6030	NRSA02J-332X	MG RESISTOR	3.3kΩ 1/10W J	
R6031	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R6032	NRSA02J-183X	MG RESISTOR	18kΩ 1/10W J	20EF,30EF
R6033	NRSA02J-183X	MG RESISTOR	18kΩ 1/10W J	20EF,30EF
R6080	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R6707	NRSA02J-330X	MG RESISTOR	33Ω 1/10W J	
R6708	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R6709	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6710	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R6711	NRSA02J-104X	MG RESISTOR	100kΩ 1/10W J	
R6712	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6713	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R6714	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6715	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R6716	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R6719	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R6720	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
R6721	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
R7202	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R7203	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7204	QRE121J-100Y	C RESISTOR	10Ω 1/2W J	
R7301	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7302	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7303	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R7304	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R7305	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R7309	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R7311	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R7312	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7314	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7315	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7318	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7319	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7320	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7335	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7336	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7337	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R7338	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7339	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R7340	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7341	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R7342	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R7343	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7344	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7345	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7346	NRSA63D-680X	MG RESISTOR	68Ω 1/16W D	
R7347	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7349	QRE121J-331Y	C RESISTOR	330Ω 1/2W J	
R7350	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R7351	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R7352	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R7353	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7354	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7355	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7356	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7357	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7358	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7359	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7360	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7361	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7367	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R7368	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R7378	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R8001	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J	
R8002	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J	
R8007	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8008	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8013	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8014	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8015	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8016	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8017	NRSA63J-203X	MG RESISTOR	20kΩ 1/16W J	
R8019	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D	
R8020	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D	
R8021	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D	
R8022	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D	
R8023	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D	
R8024	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D	
R8026	NRSA63J-203X	MG RESISTOR	20kΩ 1/16W J	
R8031	NRSA63D-203X	MG RESISTOR	20kΩ 1/16W D	
R8032	NRSA63D-203X	MG RESISTOR	20kΩ 1/16W D	
R8033	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R8034	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R8035	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R8036	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R8039	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R8040	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R8041	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R8042	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R8043	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R8044	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R8045	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R8046	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R8047	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R8201	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R8202	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R8203	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R8204	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R8206	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R8211	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D	
R8212	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D	
R8213	NRSA63D-512X	MG RESISTOR	5.1kΩ 1/16W D	
R8214	NRSA63D-512X	MG RESISTOR	5.1kΩ 1/16W D	
R8215	NRSA63D-121X	MG RESISTOR	120Ω 1/16W D	
R8216	NRSA63D-121X	MG RESISTOR	120Ω 1/16W D	
R8217	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D	
R8218	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D	
R8219	NRSA63D-512X	MG RESISTOR	5.1kΩ 1/16W D	
R8220	NRSA63D-512X	MG RESISTOR	5.1kΩ 1/16W D	
R8221	NRSA63D-121X	MG RESISTOR	120Ω 1/16W D	
R8222	NRSA63D-121X	MG RESISTOR	120Ω 1/16W D	
R8223	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R8224	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R8233	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8234	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8241	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R8242	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R8244	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R8249	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R8250	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R8252	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R8301	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R8302	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R8303	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R8304	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R8305	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R8306	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R8307	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R8308	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R8309	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R8310	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R8311	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R8312	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R8313	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R8314	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R8315	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R8316	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R8321	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R8322	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R8323	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R8324	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R8325	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R8326	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R8501	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R8502	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R8503	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R8504	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R8505	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R8506	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R8507	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
L3001	QQL231J-R22Y	COIL	0.22uH J	
L4001	QQL29BJ-100Z	P COIL	10uH J	
L4002	QQL29BJ-100Z	P COIL	10uH J	
L4006	QQL29BJ-100Z	P COIL	10uH J	
L4007	QQL071J-8R2Y	COIL	8.2uH J	
L4201	QQL29BJ-100Z	P COIL	10uH J	
L4301	QQL29BJ-100Z	P COIL	10uH J	20EF,30EF
L6001	QQL29BK-1R0Z	P COIL	1uH K	
L6002	QQL29BK-1R0Z	P COIL	1uH K	
L6005	QQL29BK-1R0Z	P COIL	1uH K	
L6701	QQL29BJ-3R3Z	P COIL	3.3uH J	
L7201	QQL29BJ-100Z	P COIL	10uH J	
L7304	QQL29BJ-100Z	P COIL	10uH J	
L7325	QQL071J-6R8Y	COIL	6.8uH J	
L8501	QQL071J-1R0Y	COIL	1uH J	
B4001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B4002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B4102	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B7301	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B7304	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B7305	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B7306	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
CN3001	QGF1207C1-18	CONNECTOR	FFC/FPC (1-18)	
CN3002	QGF1207C1-13	CONNECTOR	FFC/FPC (1-13)	
CN4001	QGF1207C1-11	CONNECTOR	FFC/FPC (1-11)	
CN4101	QGB2027M5-28S	CONNECTOR	B-B (1-28)	
CN4102	QGB2027M5-20S	CONNECTOR	B-B (1-20)	
CN5101	QGF1207C1-19	CONNECTOR	FFC/FPC (1-19)	
CN7301	QGF1207C1-07	CONNECTOR	FFC/FPC (1-7)	
GN1	QNZ0136-001Z	EARTH PLATE		
GN2	QNZ0136-001Z	EARTH PLATE		
GN5	QNZ0136-001Z	EARTH PLATE		
GN6	QNZ0136-001Z	EARTH PLATE		
J4109	QNS0089-001	3.5 JACK	COMPU LINK/SAT	
J7301	QNZ0516-001	RGB CONNECTOR	L-1	
J7302	QNZ0516-001	RGB CONNECTOR	L-2	
J7309	QNN0635-002	PIN JACK	COMPONENT	
J8501	GP1FP513TKBF	OPT TRANSMITTER	OPTICAL/COAXIAL	
K6701	NQR0200-003X	FERRITE BEADS		
K6702	NQR0200-003X	FERRITE BEADS		
K6703	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
K6704	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K6705	NQR0200-003X	FERRITE BEADS		
K6706	NQR0200-003X	FERRITE BEADS		
K6707	NQR0129-003X	FERRITE BESDA		20EF,30EF
K6708	NQR0200-003X	FERRITE BEADS		
K8001	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
K8002	NQR0339-001X	FERRITE BEADS		
K8201	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
K8401	NQR0339-001X	FERRITE BEADS		
K8501	NQR0227-004X	FERRITE BEADS		
TU6001	QAU0299-001	TUNER		20EF,30EF
TU6001	QAU0323-001	TUNER		20E,20EK,30E,30EK,30ER
W1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W3	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W5	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W6	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W7	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W8	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W9	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W10	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W11	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W12	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W13	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W14	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W15	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W16	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W17	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W18	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W19	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W20	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W21	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W22	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W23	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W24	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W25	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W26	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W27	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W28	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W29	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W30	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W31	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W32	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W33	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W34	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W35	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W36	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W37	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W38	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W40	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W41	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W42	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W43	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W44	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W45	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W46	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W47	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W48	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W49	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W50	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W51	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W52	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W53	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W54	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W55	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W56	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W57	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
X3001	QAX0444-001	CRYSTAL	32.768kHz	20EF,20EK,30EF,30EK
X3001	QAX0445-001	CRYSTAL	32.768kHz	20E,30E,30ER
X3002	QAX0527-001	CRYSTAL	10.000000MHz	
X4001	QAX0576-001	CRYSTAL	4.433619MHz	
X6701	QAX0773-001Z	CRYSTAL	18.432000MHz	
OT1	PEME0946-04	SPACER	(x3)	

Operation board

Block No. [2][7]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-04F3	OPERATION BOARD ASSY		20EF,30EF
PW1	LPA10239-05E3	OPERATION BOARD ASSY		20EK,30EK
PW1	LPA10239-06E3	OPERATION BOARD ASSY		20E,30E,30ER
Q7103	DTA114ESA-T	DIGI TRANSISTOR		
Q7104	DTA114ESA-T	DIGI TRANSISTOR		
Q7105	DTA114ESA-T	DIGI TRANSISTOR		
Q7106	DTA114ESA-T	DIGI TRANSISTOR		
Q7107	DTA114ESA-T	DIGI TRANSISTOR		
D7112	1SS133-T2	DIODE		
D7112 or	1SS270A-T2	SI DIODE		
D7113	1SS133-T2	DIODE		
D7113 or	1SS270A-T2	SI DIODE		
D7114	1SS133-T2	DIODE		
D7114 or	1SS270A-T2	SI DIODE		
D7115	1SS133-T2	DIODE		
D7115 or	1SS270A-T2	SI DIODE		
D7123	SLR-343MC-T	LED	VIDEO	
D7124	SDPC3DC0	LED	DVD	
D7125	SLI-343URC3F	LED	DVD REC	
D7126	SDPB3DC0	LED	HDD	
D7127	SLI-343URC3F	LED	HDD REC	
C7150	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7151	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7153	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
R7106	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
R7108	QRE141J-681Y	C RESISTOR	680Ω 1/4W J	
R7110	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7112	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
R7114	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7151	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7152	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7153	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R7154	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7155	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7156	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
CN7101	QGF1208F1-13	CONNECTOR	FFC/FPC (1-13)	
CN7102	QGF1208F1-11	CONNECTOR	FFC/FPC (1-11)	
J7001	QND0084-001	S JACK	FRONT S-VHS	
J7002	QNN0364-002	PIN JACK	FRONT A/V	
S7113	QSW0381-001Z	TACT SWITCH	DVD	
S7114	QSW0381-001Z	TACT SWITCH	HDD	
S7115	QSW0381-001Z	TACT SWITCH	REC	
S7132	QSW0381-001Z	TACT SWITCH	OPEN/CLOSE	
S7133	QSW0381-001Z	TACT SWITCH	STOP	
S7134	QSW0381-001Z	TACT SWITCH	PLAY	
S7135	QSW0381-001Z	TACT SWITCH	PAUSE	
W7151	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W7152	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W7153	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W7154	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

Swich display board

Block No. [2][8]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-04F2	SWITCH DISPLAY BOARD ASSY		20EF,30EF
PW1	LPA10239-05E2	SWITCH DISPLAY BOARD ASSY		20EK,30EK
PW1	LPA10239-06E2	SWITCH DISPLAY BOARD ASSY		20E,30E,30ER
IC7001	UPD16315GB-3BS	IC		
IC7001 or	PT6315	IC		
IC7002	GP1UM281XK	IR DETECT UNIT 38kHz		
IC7002 or	PNA4652M00XB	IR DETECT UNIT 38kHz		
Q7001	2SC1740S/QRS/-T	TRANSISTOR		
Q7001 or	2SC3199/YG/-T	TRANSISTOR		
Q7001 or	KTC3199/YG/-T	TRANSISTOR		
D7001	1SS133-T2	DIODE		
D7001 or	1SS270A-T2	SI DIODE		
D7021	RD9.1ES/B2/-T2	Z DIODE		
D7021 or	MTZJ9.1B-T2	Z DIODE		
D7042	1SS133-T2	DIODE		
D7042 or	1SS270A-T2	SI DIODE		
D7043	SDPB3DC0/Z1/	LED	ILLUMI.	
C7001	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7002	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7003	QEKJ1HM-106Z	E CAPACITOR	10uF 50V M	
C7006	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C7007	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7008	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C7010	QCFB1HZ-473Y	C CAPACITOR	0.047uF 50V Z	
C7011	QCFB1HZ-473Y	C CAPACITOR	0.047uF 50V Z	
C7056	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
R7001	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7002	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7003	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R7005	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7006	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7007	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R7009	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7010	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7013	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R7014	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R7015	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R7044	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J	
R7045	QRE141J-470Y	C RESISTOR	47Ω 1/4W J	
R7047	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J	
CN7001	QGF1207C1-18	CONNECTOR	FFC/FPC (1-18)	
DI7001	QLF0121-001	FL TUBE		
HD1	PQ34949-1-1	FL HOLDER(L)		
HD2	LP21255-001A	FL HOLDER(R)		
S7001	QSW0381-001Z	TACT SWITCH	STANDBY/ON	

S/RCA Out board

Block No. [2][9]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-04F5	S/RCA OUT BOARD ASSY		20EF,30EF
PW1	LPA10239-05E5	S/RCA OUT BOARD ASSY		20EK,30EK
PW1	LPA10239-06E5	S/RCA OUT BOARD ASSY		20E,30E,30ER
C7326	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7365	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7367	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
R7327	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7328	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R7365	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7366	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
CN7312	QGF1208F1-07	CONNECTOR	FFC/FPC (1-7)	
J7307	QNN0631-001	PIN JACK	REAR AUDIO OUT	
J7308	QND0009-001	S JACK	REAR S-VIDEO OUT	

Jack board

Block No. [3][6]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10239-04F4	JACK BOARD ASSY		20EF,30EF
PW1	LPA10239-05E4	JACK BOARD ASSY		20EK,30EK
PW1	LPA10239-06E4	JACK BOARD ASSY		20E,30E,30ER
CN4104	QGB2027M1-10S	CONNECTOR	B-B (1-10)	
J4112	QNZ0575-001	D CONNECTOR	FRONT DV	
OT1	QZW0021-001	PC SUPPORT		

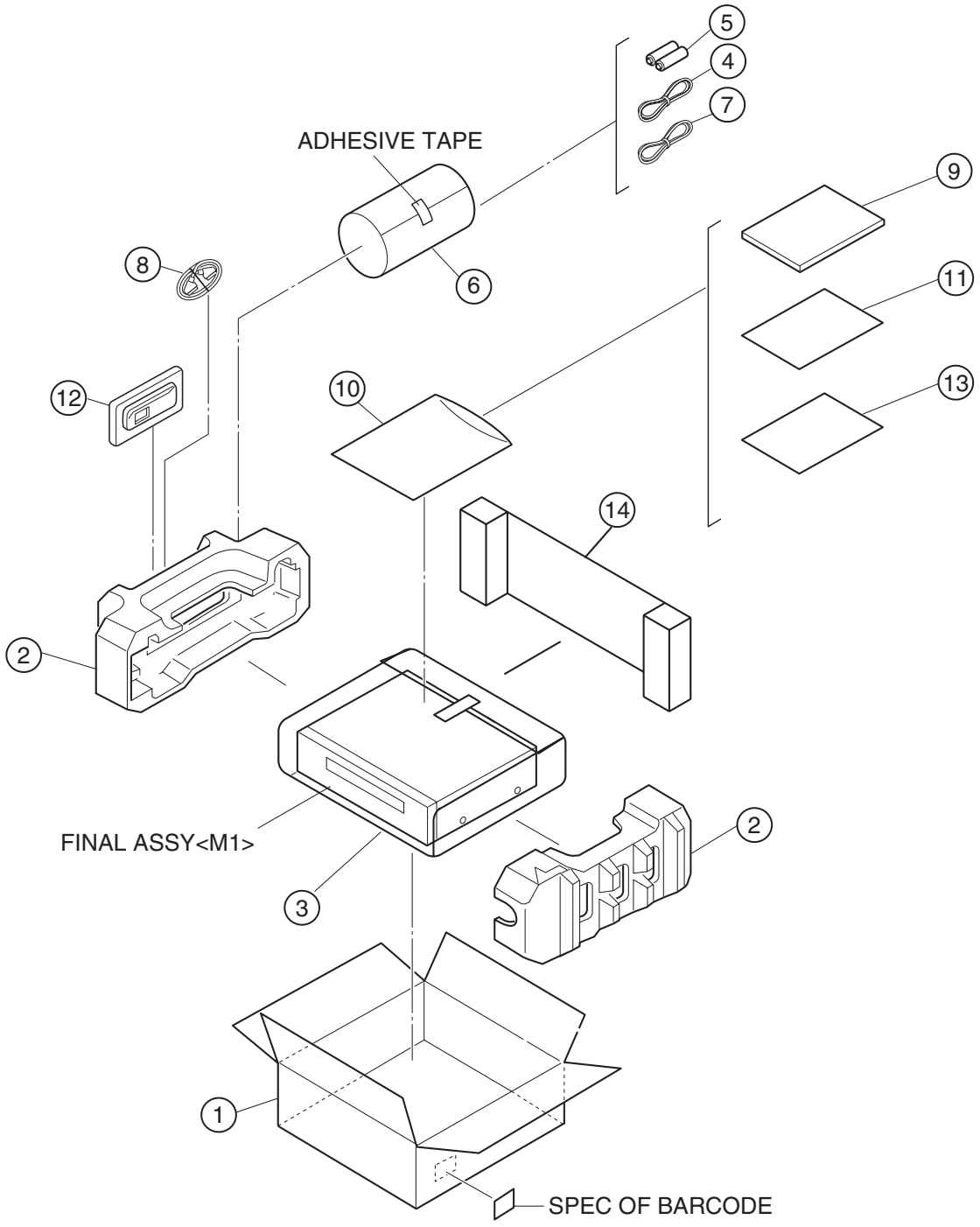
MAIN SUB board

Block No. [9][9]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	YB20835G-CS	MAIN SUB CM ASSY		
K0110	NQR0129-002X	FERRITE BEADS		
K0120	NQR0129-002X	FERRITE BEADS		
K0130	NQR0129-002X	FERRITE BEADS		

Packing materials and accessories parts list

Block No.M2MM



Packing and accessories

Block No. [M][2][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	LP31384-013A	PACKING CASE		20E
1	LP31384-014A	PACKING CASE		20EF
1	LP31384-015A	PACKING CASE		20EK
1	LP31384-008A	PACKING CASE		30E
1	LP31384-009A	PACKING CASE		30EF
1	LP31384-010A	PACKING CASE		30EK
1	LP31384-026A	PACKING CASE		30ER
2	LP31387-002A	CUSHION ASSY		
3	PQM30021-93	POLY BAG		
4	QAM0525-002	RF CABLE		
5	----------	BATTERY	R6 TYPE(x2)	
6	QPC02202230P	POLY BAG	22cm x 22cm	
7	QAL0517-005	LED CABLE ASSY		
8	QAM0502-002	PERI CABLE		
⚠ 9	LPT0923-001A	INST.BOOK	(ENGLISH)	20E,30E
⚠ 9	LPT0923-002A	INST.BOOK	(GERMANY)	20E,30E
⚠ 9	LPT0923-003A	INST.BOOK	(FRENCH)	20E,30E
⚠ 9	LPT0923-004A	INST.BOOK	(DUTCH)	20E,30E
⚠ 9	LPT0923-005A	INST.BOOK	(SPANISH)	20E,30E
⚠ 9	LPT0923-006A	INST.BOOK	(ITALIAN)	20E,30E
⚠ 9	LPT0923-007A	INST.BOOK	(DANISH)	20E,30E
⚠ 9	LPT0923-008A	INST.BOOK	(SWEDISH)	20E,30E
⚠ 9	LPT0923-009A	INST.BOOK	(FINNISH)	20E,30E
⚠ 9	LPT0923-010A	INST.BOOK	(NORWEGIAN)	20E,30E
⚠ 9	LPT0923-011A	INST.BOOK	(PORTUGUESE)	20E,30E
⚠ 9	LPT0923-012A	INST.BOOK	(CZECH)	20E,30E
⚠ 9	LPT0923-013A	INST.BOOK	(POLISH)	20E,30E
⚠ 9	LPT0923-014A	INST.BOOK	(HUNGARIAN)	20E,30E
⚠ 9	LPT0924-001A	INST.BOOK	(FRENCH)	20EF,30EF
⚠ 9	LPT0925-001A	INST.BOOK	(ENGLISH)	20EK,30EK
⚠ 9	LPT0955-001A	INST. BOOK	(RUSSIAN)	30ER
10	QPC02503530P	POLY BAG	25cm x 35cm	
11	BT-54023-1	WARRANTY CARD		
12	RM-SDR011E	REMOCON		
13	VNA3000-204	REGISTER CARD		20EK,30EK
14	LP31399-001A	SHEET ASSY		20EK,30EK